CAUSE NO. 262-94

VICKI STACKS, as Next Friend of Shannon Moore, A Minor, Plaintiff,	IN THE DISTRICT COURT
v.	
PHILIP MORRIS INCORPORATED; PHILIP MORRIS U.S.A.; and SHELLY MOORE, Defendants.	JOHNSON COUNTY, TEXAS 18TH JUDICIAL DISTRICT

* *

ORAL DEPOSITION OF
DEBORAH J. NEWMAN
OCTOBER 30, 2000

* *

ORAL DEPOSITION OF DEBORAH J. NEWMAN, produced as a witness at the instance of the Plaintiff, and duly sworn, was taken in the above-styled and numbered cause on the 30th day of October, 2000, from 9:14 a.m. to 3:17 p.m., before Valarie L. Schmit, RPR, in and for the State of Virginia, reported by Stenograph Machine, at the offices of Hunton & Williams, 951 East Byrd Street, Richmond, Virginia 23219, pursuant to the Texas Rules of Civil Procedure and the provisions stated on the record or attached hereto.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A P P E A R A N C E S

FOR THE PLAINTIFF:
Mr. Robert B. Waltman
Mr. Lynn Grisham
Waltman & Grisham
707 Texas Avenue, Suite 106D
College Station, TX 77840

FOR THE DEFENDANT PHILIP MORRIS INCORPORATED
and PHILIP MORRIS U.S.A.:

Mr. William J. Crampton

Ms. Nicola Heskett

SHOOK, HARDY & BACON

One Kansas City Place

1200 Main Street

Kansas City, MO 64105

ALSO PRESENT:

T. Wright, Videoworks

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

I N D E X

Appearances 2

DEBORAH J. NEWMAN

Examination by Mr. Grisham 4

Examination by Mr. Crampton 169

Examination by Mr. Grisham 170

Examination by Mr. Crampton 172

Examination by Mr. Grisham 173

E X H I B I T S

NEWMAN	DESCRIPTION	PAGE
No. 1	CV	7
No. 2	Patent Number 5,263,500	20
No. 3	Mission Statement	44
No. 4	Interoffice Correspondence, 5/3/89	104
No. 5	Interoffice Correspondence, 7/24/90	109
No. 6	Handwritten notes from meeting 8/8/90	115
No. 7	Interoffice Correspondence, 12/13/93 to D. Newman from D. McRae	117
No. 8	Interrogatories	121
No. 9	Info on Experiment 1 and 2	134
No. 10	Interoffice Correspondence, 6/9/87 to Barbro Goodman from Angela Smith	146
No. 11	Interoffice Correspondence, 7/23/81 to A. G. Kallianos from L. F. Meyer	150
No. 12	Interoffice Correspondence, 9/4/79 to W. F. Gannon from R. B. Seligman	151

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

DEBORAH J. NEWMAN,
was sworn and testified as follows:

MR. CRAMPTON: Lynn, before you start, I just want to state for the record a reminder of the confidentiality order and that this deposition probably will cover confidential material, therefore, should be maintained in confidence until we have, according to that order, had our opportunity to review the transcript for confidentiality.

MR. GRISHAM: That's correct.

EXAMINATION

BY MR. GRISHAM:

Q Ms. Newman, before we begin, would you please state your full name for the court and jury.

A My name is Deborah J. Newman.

Q Ms. Newman, where do you reside?

A I live in [DELETED].

Q Are you married?

A Yes, I am.

Q What is your husband's name?

A Kenneth A. Newman.

Q Do you bear any relation to Fred Newman?

A No, not that I know of.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Have you given a deposition before today?
A No, I have not.
Q Have you testified in any court or other proceeding before today's deposition?
A No, I have not.
Q Before we get started, then, in any depth, I'd like to cover a few basic ground rules that assist us in not only taking your deposition but also the reporter in recording the information that's taken down. And I'm certain that Mr. Crampton has had an opportunity to talk with you about what a deposition is, but do you understand that the testimony that you're giving here today will be recorded and bound in a booklet that can be used later in the trial of this case?
A Yes.
Q And do you understand that your testimony is under oath as if you were before the court and jury in person?
A Yes.
Q I'll be asking my questions much as I have already and ask that you respond after I've finished my questions so that you and I give each other the opportunity to finish the question-and-answer process without stepping on each

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

other's verbiage. Will you agree to do that as well?
A Yes.
Q I'd like, also, for you to agree to tell me if you don't understand some question that I pose to you, if it's unclear or if I've done a poor job in phrasing the question, so that I can be certain when we leave here today that answers you've given me were to questions that you understood. Will you do that?
A Yes, I will.
Q And as a final note, if you have any need to take a break at any time during the course of the deposition, please feel free to do that so that you won't be unduly uncomfortable. Will you do that?
A Yes, I will.
Q And one other matter that I always like to cover is whether or not you're taking any medication that might affect your ability to understand or articulate your answers here today?
A No, I'm not.
Q Ms. Newman, where are you currently employed?
A At Philip Morris.
Q Do you work for the entity that's described as Philip Morris USA here in Richmond, Virginia?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes, I do.

(Newman Exhibit No. 1 was marked.)

BY MR. GRISHAM:

Q I'd like to pass to you this morning an exhibit that's described as Newman Exhibit Number 1 and ask you to review that, please.

A This is a document showing my work history with Philip Morris USA, as well as my educational background.

Q All right. Thank you.

And is that up to date through today, Ms. Newman?

A Yes, it is.

Q Could you pass it back to me? I may have a couple of questions to fill in the blanks in your CV, if there are any.

I notice in the work history portion of your CV that you began work at Philip Morris USA in 1979?

A Yes.

Q Before that date how were you employed?

A I was not employed. Philip Morris was my first job coming out of college.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q It says that you were first employed in 1979 in the area of Quality Assurance, Environmental Services; correct?
A Yes.
Q And that you were, in fact, a senior technician in that position?
A Yes.
Q What were your job responsibilities as a senior technician in the Environmental Services area?
A Primarily involved with testing water samples, taking samples from bug traps, counting the number of tobacco beetles present in the bug traps, testing water taken from the boiler, air conditioning units, water quality testing, primarily.
Q Changing the focus a moment to your education. I notice here that you have a bachelor of science degree in biochemistry and then later a master of business administration which you completed in 1978 and 1984, respectively; correct?
A Yes.
Q And I take it that the bachelor of science degree in biochemistry is the degree that allows you to have the skill, knowledge and training that led up to your employment as a senior technician; is that correct?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q In the area of biochemistry, did you have specialized or particular training in the areas of environmental science or water quality?
A No.
Q Generally speaking, to the layperson, such as myself, who has no training in biochemistry, what do biochemists traditionally do? What fields do they traditionally work in?
A To the best of my knowledge, any industry that involves chemical analysis or production of chemicals.
Q As a senior technician in Quality Assurance back in 1979, what particular group did you work for? Or perhaps to better state it, who was your immediate supervisor?
A His last name was Wagner. I can't recall his first name.
Q In the course of that job, did you have any opportunity to work on projects that involved self-extinguishing cigarettes or reduced ignition propensity candidates?
A No.
Q Your CV tells us that in 1980 you apparently switched to another area within Philip

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Morris USA, to Operations Services as a project specialist; is that true?

A Yes, it is.

Q What different job responsibilities or duties did you undertake in that position, if any?

A That group was a manufacturing support group. I was involved primarily with specifications, the maintenance of cigarette specifications.

Q Would the specification maintenance that you were dealing with deal with physical manufacturing issues as opposed to analytical issues?

A I'm not sure I understand.

Q Okay. In dealing with the specifications, were you focusing in that portion of your job on the constituents of the smoke, the amount of tar, for instance, in the cigarette and carbon monoxide chemical structures of the cigarette smoke as opposed to how the cigarette is built and maintaining those specifications?

A To the extent that when a particular product would exceed the specification limits for tar, then we would typically make something like a cigarette paper change. Then I would be involved in issuing that new specification to the factory.

Q It appears that you held that particular

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

job as project specialist for about three years.
A Yes.
Q Did the job as project specialist involve physically placing cigarettes on a smoking machine?
A No, it did not.
Q What did you do on a day-to-day basis? Did you review data? Conduct tests?
A I would review data, not on a daily basis, but more like on a weekly basis. And if a decision was made to change a material, then I would issue the specification.
Q Would the material that you reviewed in that context have been random samplings, for instance, of production cigarettes?
A Yes.
Q In the course of that job as project specialist for Operation Services, did you have an opportunity to work in the areas of reduced ignition propensity cigarette candidates or self-extinguishing cigarette candidates?
A No, I did not.
Q In 1983 you began to work as a senior planning analyst for Manufacturing Analysis and Planning; correct?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q Was that a promotion for you?
A Yes, it was.
Q Who did you work -- who did you report to in that position?
A That was Bob Bryant.
Q How did that job change in terms of its duties and responsibilities from the previous job that you had held as project specialist for Operation Services?
A That position dealt more with things like capital forecasting and working on manufacturing improvement projects, things of that nature, more of a financial nature.
Q Did any of the projects that you dealt with in that position touch upon or deal in any respect to the reduced ignition propensity candidates or self-extinguishing cigarette candidates?
A No, it did not.
Q In the job of senior planning analyst, did your duties and responsibilities deal in any respect to paper studies?
A No, it did not.
Q From your CV it appears in 1986 that you changed jobs within the company again to move to Research and Development for International Product

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Development?
A Yes.
Q And that your particular job title was product development engineer --
A Yes.
Q -- correct?
Now, by that time you had completed your master of business administration while you were employed at Philip Morris?
A Yes, that's correct.
Q Did Philip Morris provide any of the financing for that particular course of study?
A Yes, it did.
Q And how did they do that? Was it by providing time off from work at pay, or did they provide tuition reimbursement or other incentives like that?
A They provided tuition reimbursement.
Q During that time, though, you continued to work full time at Philip Morris?
A Yes, I did.
Q What occurred to bring about this change in jobs in 1986 to Research and Development?
A The Manufacturing Analysis and Planning Department was actually dissolved at that point in

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

time, and all of the people in that department were transferred to various regions within the company.

Q As a product development engineer in 1986, did your job responsibilities and duties have any bearing on the research and development surrounding a reduced ignition propensity cigarette candidate or a self-extinguishing cigarette candidate?

A No, it did not.

Q In the course of the two years that you held that position, were either of those subjects involved in your work?

A No, it was not.

Q With respect to International Product Development, what was your particular focus within that job?

A I dealt with the development of new products or prototypes for various international regions.

Q Would those product development issues surround analytical smoke studies, quality -- smoke quality issues as opposed to some other aspect of manufacturing?

A Not necessarily. It could be the development of a brand-new product, or it could be a

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

modification of an existing product and some issue.
Q With respect to the development of those products, were they varied in what they would deal with; for instance, paper modifications or blend modifications? Or was there a particular area that you worked in while you were dealing with international product development?
A It was a variety of areas, paper as well as blend modifications.
Q In 1988 it appears that you, while you stayed within the same division or area, that you became a coordinator for International Product Development within the Research and Development area?
A Yes.
Q And I take it that was a promotion?
A No.
Q No, it wasn't?
A No, it wasn't.
Q Okay. What brought about that change in employment?
A There was an individual serving in that capacity who was going to be transferred, so I was, essentially, put into that role to fill that.
Q So that was more a lateral move within the department?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q How did your job duties change as coordinator of International Product Development as opposed to product development engineer?
A I was more involved with the reporting of the status of programs to the management of the different regions, more of an administrative function.
Q And you held that position for about a year, until 1989, when you changed your area of work to Domestic Product Development but still within Research and Development; is that correct?
A Yes.
Q What brought about that change?
A I don't really know. I was just told I was going to move over to Domestic Product Development.
Q Did the type of work that you were conducting change along with that change in job description?
A I went back more to the development of new products as opposed to the administrative piece of it.
Q It appears from your CV that you stayed within the Research and Development Domestic Product

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

Development area for about ten years, through 1999; correct?

A Yes.

Q And then you moved to Research and Development, New Business Development, as a senior staff engineer?

A Yes.

Q What brought about that change?

A I was told there was a need for me to go work in this different area and actually work on the Accord product.

Q To work on what?

A Accord product.

Q What was the Accord product?

A The Accord product is an electrically heated cigarette.

Q Was that a further development of the Delta research?

A Yes.

Q Are you currently continuing to work as a senior staff engineer in Research and Development for New Business Development?

A Yes.

Q In your role in that particular position, are you dealing with issues of the quality of the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

smoke and the constituents of the smoke, in particular as opposed to other aspects of the design?

A That is something that we look at, yes.

Q Is that something that you, in particular, have responsibility for looking at?

A That's -- I wouldn't say responsibility. That's a piece of what I do. I work with paper, primarily.

Q Before coming to work for Philip Morris, in the course of your training in biochemistry, did you have any experience with working with cigarette papers?

A No.

Q Or any particular training in that area?

A No, I did not.

Q Would it be accurate, then, to say that the knowledge and experience that you've acquired here at Philip Morris forms the basis of what you currently understand and know about cigarette paper development and specifications?

A Yes.

Q Did that knowledge come about through on-the-job training as opposed to particular courses that you might attend?

A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q In the course of your work here at Philip Morris, have you had opportunities to participate in Richmond review meetings?
A I'm not sure I understand.
Q Have you heard of the term "Richmond review meetings"?
A Richmond review meetings. No.
Q Has any of your work involved meeting with other employees or researchers at Philip Morris in the New York offices?
A I have, on occasion, been to the New York office.
Q Does your employment with Philip Morris involve a contractual relationship, a written contractual relationship between you and Philip Morris?
A I don't believe so. I can't recall everything that transpired when I was first hired back in '79.
Q In the course of your employment with Philip Morris or just preceding your employment with Philip Morris, do you recall signing any sort of confidentiality agreements or nondisclosure agreements?
A No.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q And as we sit here today, because of the passage of time, you don't really remember if you had a particular written employment contract?
A That's correct.
Q Before we leave the area of your job responsibilities, titles, things of that nature, I'd like to find out if, in addition to the educational reimbursement benefit that you've already talked to me about, if your job with Philip Morris has, through today, provided any other benefits, other than, obviously, a salary?
A No.
Q And I assume you have a retirement plan here at Philip Morris?
A Yes.
Q It's my understanding that you do not currently have any publications in your area of work; is that correct?
A That's correct.
Q But you do have a patent that you're a coinventor on; is that correct?
A Yes.

(Newman Exhibit No. 2 was marked.)

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

BY MR. GRISHAM:

Q I'm going to hand you what has been marked as Newman Exhibit Number 2 and ask you to identify that document, if you can, please.

A Yes. This is a copy of the U.S. patent that I'm listed on.

Q And you are the -- one of the several persons who participated in receiving that patent grant; correct?

A Yes.

Q Who are the other inventors?

A You want me to read them?

Q If you would, please.

A Sheryl D. Baldwin, Rowland W. Dwyer, Barton Floyd, Robert M. Rogers, Edward B. Sanders, Barbro L. Goodman.

Q Can you tell me when the patent application was filed for that particular patent?

A It was filed April 12, 1991.

Q And when it was granted?

A It was granted November 23, 1993.

Q Was the -- or were the rights to that patent assigned to some individual or company other than the inventors?

A No, not to my knowledge.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Who holds that patent? Who owns it now?
A Philip Morris.
Q Is that because you worked for Philip Morris at the time that the work underlying that patent was done?
A Yes.
Q Are the other inventors or coinventors on that patent Philip Morris employees?
A I assume they were at the time.
Q For instance, Ms. Baldwin, is she a current employee?
A I don't believe so.
Q Do you know where she resides or works at this time?
A No, I do not.
Q What does the patent marked as Exhibit Number 2 deal with?
A This is a cigarette paper with a controlled puff count.
Q What is "puff count"?
A Puff count is just the number of puffs taken when a cigarette's smoked on a smoking machine.
Q Why is that important in cigarette design?
A Typically, tar per puff is linked to

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

taste. So -- so that in this case, this was associated with the development of an ultra-low delivery product. Taste was a major concern.

Q Okay. And so by altering the puff count, then, the flavor or taste of the cigarette could be improved?

A That's one way, yes.

Q There are other means to do that, I'm sure, which we'll talk about in just a bit.

Were there any other benefits to the particular patent that's marked as Exhibit Number 2, other than controlling puff count?

A No.

Q And, generally, how was the puff count control achieved through the patent that you cofiled?

A Through the use of calcium carbonate -- adjusting the level of calcium carbonate as filler in the cigarette paper.

Q Has calcium carbonate been an additive to cigarette paper for some time?

A Yes.

Q How long, if you know?

A I don't know. Ever since I've been employed here.

Q Is calcium carbonate a -- would it be

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

accurate to call it a compound?
A It's a -- yes, you could call it that.
Q And throughout your work at Philip Morris, calcium carbonate has been a compounded that has been used in cigarette paper as a means of controlling the performance of the cigarette?
A Well, it's used in making cigarette paper as -- you couldn't make cigarette paper without a filler. So it's an essential ingredient in order to make paper.
Q Besides the control of the puff count, which we're going to talk about more in depth, throughout the time that you've worked at Philip Morris and were aware of the use of calcium carbonate as a filler in cigarette paper, have you known of other benefits or qualities that it imparts to the performance or subjective quality of the cigarette?
A No. Excuse me. No.
Q Does the calcium carbonate affect the burn rate of the cigarette?
A Yes, it does.
Q How so?
A The more calcium carbonate in the paper, the faster the paper will burn.
Q And what chemical process causes that?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

A I'm not sure I can -- I can -- can say, actually.
Q In the -- or during the time that you've been employed at Philip Morris, would the levels of calcium carbonate used as filler in the papers, wrappers used for the cigarettes, change from time to time?
A No, not in general. This particular paper designed for this product had a higher level of calcium carbonate than the majority of the other cigarette papers that we used.
Q And what was the -- what was different about the paper that you were -- you and the others were designing this level of calcium carbonate for that required it to have additional calcium carbonate?
A The goal was to reduce the puff count to increase the taste. And it was found by increasing the calcium carbonate level to reduce the puff count, we had better subjectives than by, say, increasing a burn additive to the paper.
Q But there are several different ways to increase or decrease the rate at which a cigarette burns; correct?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Q And that's through chemical additions to the paper?
A Yes.
Q And there are several different ways to control puff count?
A Yes.
Q And many of those deal with designs associated with the paper.
A I'm not sure I understand.
Q Many of the ways that one can control puff count deal with changes that can be made to the paper.
A I would not say many, no.
Q Other than through the manipulation of the level of calcium carbonate, are there any other ways that paper can be modified to control puff count?
MR. CRAMPTON: Objection. Misstates the testimony and vague.
BY MR. GRISHAM:
Q Do you understand my question, Ms. Newman?
A No.
Q Let me back up a little bit.
It was my understanding that one way that

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

puff count of a cigarette can be controlled is through the different additive levels of calcium carbonate; is that true?

A Yes.

Q And a researcher, such as yourself, can specify a little bit more, a little bit less calcium carbonate in the paper, and it will affect the rate -- or the number of puffs that the cigarette is capable of producing on a machine?

A It will affect the burn rate of the paper.

Q Okay. And the burn rate, in turn, affects the puff count.

A Yes.

Q Other than calcium carbonate as a means to do that, are there other ways that puff count can be altered in terms of alterations to the paper or wrapper of the cigarette?

A The amount of burn additive added to the paper can be changed. An increased level of a burn accelerant will cause the paper to burn faster.

Q Such as citrate?

A Such as citrate, yes.

Q Other than the calcium carbonate additives and the citrate, are there other means of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

treating or modifying the design of the paper to achieve reduced puff count?

A The porosity of the paper will have an effect on puff count, yes.

Q Others? There any others?

A No, not that I can think of. No.

Q And the particular patent that you're holding before you, Exhibit Number 2, is it a patent that deals with a formulation for amount of calcium carbonate in the paper?

A It covers a range of inclusion levels of calcium carbonate.

Q What makes the patent marked as Exhibit 2 a novel art or science that entitled it to patent protection?

A I believe the fact that the calcium carbonate level and the particle size of the calcium carbonate, the discovery that those two variables can be changed to affect the puff count and, therefore, improve the subjective characteristics of the product would give it the -- the discovery that allows it to be patented.

Q Was the patent marked as Exhibit 2 something that was developed for its use in papers that also had the goal of reducing the ignition

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

propensity or, perhaps, self-extinguishing cigarette?
A No.
Q What was the overall goal that that particular design -- patented design hoped to achieve?
A The overall goal, as I said, was to develop a paper for this ultra low delivery product that would allow that product to have improved taste characteristics through lower puff count.
Q Was that for a low delivery product that was ultimately marketed?
A Yes.
Q And has it been marketed under a particular name?
A Yes.
Q What is that name?
A Merit Ultima.
Q Does the Merit Ultima design or commercial product contain PaperSelect as one of its design parameters?
A It's my understanding it does today, yes.
Q And what is your understanding of the use or benefit of PaperSelect?
A PaperSelect was developed to reduce the ignition propensity products.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Q And does PaperSelect actually incorporate this concept of cellulose bands within the paper to bring about self-extinguishment of a cigarette?
A Yes.
Q And does the patent that you have been listed as inventor on provide an alteration of a chemical constituent of the paper that makes it perform subjectively better in the PaperSelect product?
A No.
Q Do you know why the design that is included in the patent marked as Exhibit 2 is incorporated in the PaperSelect products?
MR. CRAMPTON: Actually, could I have that question read back?
MR. GRISHAM: I'll restate it.
MR. CRAMPTON: Yeah, I didn't understand the question.
MR. GRISHAM: Sure.
BY MR. GRISHAM:
Q It's my understanding that Merits today are being marketed with PaperSelect, the banded paper; is that correct?
A Yes.
Q And the Merits with the PaperSelect also

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

incorporate this design that you hold before you in the patent for calcium carbonate additions to paper; correct?

A No.

Q I misunderstood. I'm sorry.

Other than the Merit Ultima -- is that the correct name for it?

A Yes.

Q -- are there other products at Philip Morris that incorporate the design that you helped invent?

MR. CRAMPTON: Objection. Vague. You're assuming that there is currently some product at Philip Morris that uses this paper described in this patent, and I'm not sure that's been established. So I guess my objection is foundation.

BY MR. GRISHAM:

Q Well, is the Merit Ultima a product that Philip Morris is currently marketing?

A Yes, it is.

Q And does the Merit Ultima use the designs that you are coinventor on in the patent that's marked as Exhibit 2?

A No, it doesn't, not today.

Q I'm sorry. I misunderstood your

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

testimony, then.
Is the design that you helped coinvent used in any product in Philip Morris today?
A I'm really not sure that that particular paper is a standard item for us today. I'm not aware of which brands might have it and which might not at this point.
Q So some of the brands at Philip Morris might, in fact, use the design that you helped invent?
A Yes.
Q But you're just not sure here today?
A That's right.
Q In the course of your work at Philip Morris, have you served on any committees?
A Can you clarify what you mean by "committees"?
Q Yes. Some jobs have, as I understand it, committees who work on specific projects or do independent research within a department. They might involve ignition propensity studies. They may involve paper studies or analytical testing of products. Is there any particular committee that you served on or met with or provided input to?
A No, not that I recall.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Q Were there any particular work groups or research groups that you were involved in?
A Not that I would call a committee or a -- I'm not sure I understand.
Q In terms of the organizational aspects of your job at Philip Morris, from the time you became involved in the research and development, was the Research and Development Department organized in a fashion -- in a hierarchical fashion; in other words, a director and then persons who reported to the director and persons who reported to them?
A Yes.
Q Were those different subdivisions within Research and Development sometimes given names?
A Other than a name such as Domestic Product Development, no.
Q Okay. Were they given names like "paper group"?
A Okay. There was a group within Domestic Product Development that was frequently referred to as a paper group.
Q Okay.
A But they --
Q Did you ever work on that -- with that group or as a member of that group?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A I was never a member of that group.
Q Were there other groups that you were a member of at any time that you were involved in research and development?
A No.
Q Could I see Exhibit 2 for a moment? I may have a couple more questions about that. Thank you.
Before the patent marked as Exhibit 2 was -- application was filed, was there a process at Philip Morris whereby the novel idea was submitted to your bosses here at Philip Morris for consideration?
A There is a process where an invention disclosure is filled out and submitted to levels of management, yes.
Q Do you recall when the invention disclosure related to the patent marked as Exhibit 2 was submitted?
A No, I do not.
Q Can you give me even a year?
A No. I did not write the invention disclosure.
Q Can you recall during what years the research culminating in that invention disclosure was conducted?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Not specifically.
Q Can you generally give me a range of years?
A I would say probably the late 1980s.
Q What is it about the burn rate alteration that can affect flavor of cigarettes in a positive way?
A As I said earlier, the number of puffs for any given product effects the tar per puff, which is a simple calculation; tar divided by puffs. And it's been established by our consumer research group that tar per puff is linked to taste.
Q And the calcium carbonate creates a faster burning paper which reduces the number of puffs?
A It can reduce the number of puffs, yes, if -- you can -- if you don't take other measures to alter the puff count.
Q Is there a correlation between the amount of calcium carbonate and the paper porosity that one can design to fine tune the puff count and flavor?
A Not a direct correlation, no. The porosity of the paper can be adjusted without changing the calcium carbonate level.
Q Okay. If the calcium carbonate level is

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

not changed but the porosity is decreased, does that affect the burn rate?

A Yes.

Q And, thus, if one wanted to either increase or decrease the porosity of the paper, could one also then fine tune the calcium carbonate to produce the desired number of puffs?

A Either of those variables can be changed independently or together.

Q And would such a change -- in other words, can you counterbalance a paper that's much more porous by adding more calcium carbonate?

A I don't understand.

Q Okay. What I'm getting at is this.

If you have a paper that you design that's not very porous and you want to create a better flavor or you want to reduce the puff count for some other reason, can you just add more calcium carbonate to compensate for that nonporous paper?

A No, I don't think so.

Q And why not?

A I don't -- it's not a simple process of just dumping in more calcium carbonate.

Q Okay.

A Calcium carbonate by itself does not

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

affect the taste or the flavor, as you put it. It's the puff count and the number of puffs which would affect the flavor -- the taste.

Q That's what I understood as well. But what I'm saying is this.

Hypothetically, if someone that you were working with at Philip Morris said, look, Ms. Newman, I have here a paper that is not very porous but I want -- and, thus, it has a high puff count, and I would like for you to help me get the puff count down, could you, as a researcher, then, specify the amount of calcium carbonate that would, in fact, achieve that goal?

MR. CRAMPTON: Lynn, involved in that question is not changing the porosity of the paper?

MR. GRISHAM: Right. I was assuming that there was a paper with a given porosity.

A You can increase a calcium carbonate level to a point without affecting the porosity. But it's not an unlimited amount.

BY MR. GRISHAM:

Q Okay. So at some point, then, the researcher, such as yourself, might want to alter -- increase the calcium carbonate but also increase the porosity just a bit to achieve the desired number of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

puffs?
A That's a possibility, yes.
(Mr. Waltman exited the room.)
BY MR. GRISHAM:
Q The patent marked as Exhibit 2 that you were coinventor on, would you say that that created a novel idea that would assist other researchers in the development of banded paper products?
A No. It was not linked to banded paper.
Q At any time in your work at Philip Morris, have you worked on any aspect of the design, development or commercialization, of a reduced ignition propensity cigarette or self-extinguishing cigarette candidate?
A Yes.
Q When did that first begin?
A I believe it was around 1989.
Q How did you come to be aware of such research?
A When I moved into the domestic cigarette product development area.
Q Who advised -- I'm sorry. Didn't mean to interrupt you. Finish your answer.
A When I moved into that area is when I became aware of that project.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Who advised you of the existence of that project in 1989?
A I believe the manager at that time in that area was Willie Houck.
Q I'm sorry?
A Willie Houck was the manager of that area.
Q How do you spell his last name?
A H-O-U-C-K.
Q And what was his job description?
A He was the manager of domestic cigarette product development.
Q What did Mr. Houck tell you about the research in that area?
A Excuse me. I don't really recall specifics, other than since I now reported into that area, I remember discussing with him that I had an interest in that program.
Q How did you develop an interest in the program?
A How did I develop -- to me, it seemed like an interesting high technology, something that was different from standard product development projects.
Q Before 1989 and moving into Domestic

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Product Development, did the concept or idea of manipulating the cigarette to reduce its ignition propensity ever enter your mind?

A No.

Q Before 1989 and moving to Domestic Product Development, were you aware of any research at Philip Morris regarding ignition propensity or ignition propensity studies?

A No.

Q Before 1989 and moving to Domestic Product Development, had you been aware of Project Hamlet at Philip Morris?

A No.

Q Were you told about either ignition propensity studies or Project Hamlet at any time during the course of your employment with Philip Morris up through today?

A Can you clarify what you mean by was I told of any ignition propensity studies?

Q Yes. Have you learned about any ignition propensity studies that were conducted by Philip Morris before 1989?

A Only -- no, not specific studies. Only -- I'm aware of some background that occurred with proposed legislation for ignition propensity.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q Okay. At any time, up through today, have you heard of Project Hamlet?
A Yes.
Q How did you hear about Project Hamlet?
MR. CRAMPTON: Let me just interpose a possible objection here.
To the extent that any of these questions relate to conversations with counsel, I would object to them and instruct the witness not to answer.
Did you understand that?
THE DEPONENT: Yes.
A I had heard, in general, a Project Hamlet existed.
BY MR. GRISHAM:
Q When did you hear, in general, about Project Hamlet?
A The earliest I can recall hearing about it was the time frame when there was some activity with 60 Minutes.
Q Okay. Would that have been in the 1990s or 1980s?
A I really don't recall.
Q As a member of the Research and Development division at Philip Morris, you had not heard about Project Hamlet until you heard about it

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

surrounding a 60 Minutes report?
A I can't say conclusively I never heard the name Project Hamlet. I don't recall exactly when I first heard the name of Project Hamlet. I was aware that it was a project that existed prior to my involvement in ignition propensity.
Q At some point did you learn what the goals of Project Hamlet were?
A My recollection is the goal of Project Hamlet was to reduce ignition propensity of our products.
Q When you -- I take it at some point you began to work on the issue of ignition propensity reduction?
A Yes.
Q At that time did anyone provide you with the results of any Project Hamlet research that had been conducted before you undertook those studies?
A No.
Q Did Barbro Goodman ever discuss Project Hamlet with you?
(Mr. Waltman entered the room.)
A No.
BY MR. GRISHAM:
Q Do you know Randall Greene?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A I know who he is.
Q Have you ever talked with him?
A No.
Q At any time while you've worked at Philip Morris, was Henry Merritt an employee at Philip Morris?
A I believe so. I've heard that name.
Q Did you ever meet Henry Merritt?
A No.
Q Do you know anything about his involvement with reduced ignition propensity studies or Project Hamlet?
A No.
Q Are you aware of Project Tomorrow?
A Yes.
Q How did you become aware of Project Tomorrow?
A That was the name of the project when I first became involved in it was Project Tomorrow.
Q And what did you understand Project Tomorrow to be?
A Again, the goal of Project Tomorrow was to reduce the ignition propensity of our products.
Q Do you know when it began?
A No, I do not.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q When did you learn about it, particularly, what particular year?
A When I transferred into domestics area of product development in 1989.

(Newman Exhibit No. 3 was marked.)

BY MR. GRISHAM:
Q I want to hand you what's been marked as Exhibit 3, Ms. Newman, after your counsel's had time to review it, and I'll ask you to tell me whether or not you've seen that document?
MR. CRAMPTON: I take it the highlighting that's on this document was not on it as you received it; that was something you added?
MR. GRISHAM: That's correct.
A What was your question?
BY MR. GRISHAM:
Q Yes. Have you ever seen that document before?
A No, not -- no.
Q Any portion of it?
A I have seen this front page.
Q Front page of Exhibit 3 you do recognize?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Do you know where you saw that?
A I recognize it as the general mission statement of the Tomorrow program.
Q When you were first -- let me back up.
When you went to work in Domestic Product Development, then you were told about Project Tomorrow. But before that date, were you aware of Project Tomorrow?
A No. No.
Q And who advised you about the status of Project Tomorrow?
A I don't understand the question.
Q Sure. When you were told about Project Tomorrow, did anyone tell you where the research had -- to what extent had been developed, where the company was in its progress towards achieving the mission or goal of Project Tomorrow?
A I don't recall exact conversations. As I said, I recall discussing with Willie Houck the nature of the program and my desire to become involved in it.
Q What were you going to contribute to the program?
A I was interested in working on the cigarette design portion of the program.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

Q At that time were you given information, either verbally or through documents to review, to determine what -- where the program had developed by the time you began to work on it?
A There may have been some general discussion about the current activities.
Q In 1989 when you became aware of Project Tomorrow, was there a, to your knowledge, a leading candidate for a design type to achieve the goals espoused for Project Tomorrow?
A Can you say that again?
Q Yes. In 1989 when you became aware of Project Tomorrow, was there a leading design candidate that was being researched to achieve the goal or mission of Project Tomorrow?
A Not that I'm aware of, no.
Q Were there many different design changes that were being investigated when you first learned of Project Tomorrow?
A Yes.
Q Can you tell me what those were?
A At that time there was a lot of activity around looking at cuts per inch of the tobacco filler. There was some work going on with papers as well; although, I can't remember exactly what that

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

was.

In general, the focus was on mass burn rate and reducing the mass burn rate of the product.

Q By 1989 when you became involved in Project Tomorrow, were you aware that there was a relationship between mass burn rate and ignition propensity?

A At that time that was the thinking, that mass burn rate would be a key indicator for ignition propensity.

Q And in the course of your ensuing work, did you and others at Philip Morris, in fact, confirm that there was a direct relationship between mass burn rate and ignition propensity?

A I think, yes, in general, our work confirmed that mass burn rate was an important factor. I can't say that it's the most important factor.

Q Would you agree, then, that in 1989 if one could measure mass burn rate then that would be a test that one could use to determine the ignition propensity of a particular design or model cigarette?

A No. Mass burn rate is strictly a calculated number. There's no test for mass burn rate.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Well, how would one in 1989 determine mass burn rate if there wasn't a test?
A You would simply calculate the number based on the static burn time of the cigarette and the amount of weight consumed.
Q For a nonscientist, such as myself, if I could restate that and hopefully understand what you're saying.
It's the relationship between the weight loss correlated against the time of burn; is that correct?
A Yes.
Q And that's the mass burn rate?
A In a static mode, yes.
Q Okay. Static being idling?
A Yes.
Q As opposed to dynamic, one would be smoking it?
A Yes.
Q And so by 1989, that particular mathematical function or measure was something that could be replicated in a laboratory?
A No. Typically what's measured in a laboratory is the tobacco weight of the rod and the rate at which -- the static burn rate.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q In 1989, though, that mathematical correlation was known; it was understood?
A It was understood how to calculate mass burn rate.
Q Right.
A Yes.
Q And since the researchers at Philip Morris knew how to calculate the mass burn rate, could they, in turn, go to a laboratory and demonstrate it?
A Demonstrate what?
Q The concept of mass burn rate; in other words, take a model, a prototype model, or even a commercial model, and burn it and come up with a mass burn rate number for that particular model.
A Any -- any particular model that could be analyzed in a smoking laboratory could be burned on a smoking machine, yes.
Q And one --
A And tobacco weight measured.
Q Okay. And through the measurement of the tobacco weight and the static burn time, in 1989, one could then calculate the mass burn rate.
A Yes, you could calculate mass burn rate.
MR. GRISHAM: Is this a good place for a

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

break?
MR. CRAMPTON: Sure.
(Recess.)
BY MR. GRISHAM:
Q Ms. Newman, before we move on, I'd like to ask a couple more questions about this Merit Ultima.
Is -- is that a product line, or is it a particular cigarette brand?
A It is a particular brand.
Q And it is being marketed today?
A Yes, it is.
Q Is it the low delivery type cigarette that we've talked about earlier?
A Yes.
Q And that's the major benefit that it offers over other brands is low delivery of tar?
A Yes.
Q And to your knowledge, it does contain the calcium carbonate blend that forms the basis of your invention, or it does not?
MR. CRAMPTON: Objection. I just want to object to the form of the question.
Calcium carbonate blend is vague. If you're referring to the calcium carbonate paper for

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

which she had a patent, then the question would not be vague.

MR. GRISHAM: Okay. I'm not talking about any other paper, calcium carbonate paper.

MR. CRAMPTON: Calcium carbonate blend, you're still referring to a certain type of paper, not a blend of tobacco?

MR. GRISHAM: Absolutely. Yeah.

A No, it does not contain that paper today.

BY MR. GRISHAM:

Q Did it at some point in the past?

A Yes, it did.

Q During commercial use?

A Yes.

Q Do you know why that was changed?

A It was changed with the PaperSelect program.

Q Okay. So at some point over the last ten years there was a Merit Ultima introduced into the marketplace that had the benefit of having low tar delivery?

A Yes.

Q And at some time in the past year, that product was yet changed again to include the PaperSelect banded paper?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q And when that last change was made, then the calcium carbonate paper forming the basis of your patent was no longer used in the Merit?
A That's right.
Q Was there some reason why your patented paper design wouldn't also provide the same benefit that it had along with the PaperSelect design?
A It would not give you the desired tar delivery with the PaperSelect design.
Q Your paper design, when coupled with PaperSelect, would do what to the tar delivery?
A It would increase -- the PaperSelect design would tend to increase your tar delivery.
Q Okay. Did other changes have to be made to the PaperSelect to reduce the tar delivery?
A Well, when we say PaperSelect, I think of that as banded papers, in general, and those papers would be designed to achieve the target delivery of whatever brand they were put on.
Q By "PaperSelect" I was referring to the banded paper that has the benefit of being -- having a reduced ignition propensity. Is that what you were understanding?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

Q And the banded paper or PaperSelect can be modified to achieve whatever tar delivery one wants?
A Yes.
Q And how is that done?
A Through the base paper porosity.
Q And how is the base paper porosity manipulated?
A Depending on what product is -- it would be put on, you would select the desired base paper porosity. A lower delivery product, in general, would require a higher porosity base paper.
Q Is that ability to alter the porosity new technology?
A Yes, it is, to the extent of the levels that are being achieved with the PaperSelect design.
Q And how so?
A It requires -- use of banded papers requires higher porosity base papers than we've typically used in the past.
Q By "base papers" are you referring to the paper along the entire rod of the cigarette or simply within the burn zones of the band?
A I'm referring to the rod, the entire rod.
Q Before the break we were discussing your

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

work on Project Tomorrow, and I wanted to ask you specifically about your knowledge of the concept of banded paper to reduce ignition propensity. When did you first learn of that concept?

A I don't recall, specifically. When I first became involved in the program, we were not working with the banded papers. So I would say it was probably more early '90s when that first became a part of the program.

Q Do you know whether or not others at Philip Morris were working with the banded concept, banded paper concept before the early 1990s?

A I believe there was some research work going on, but I don't know the particulars of that.

Q What input did you have or what work did you conduct that contributed to the PaperSelect product?

A I was involved in designing the base sheets and, in general, the cigarette design.

Q Was banded paper the only design candidate considered for the purpose of meeting the goals and mission statement of Project Tomorrow during your work on the project?

A No. Prior to banded papers, we looked at other configurations, again, keying on the concept of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

mass burn rate and trying to reduce the overall mass burn rate of a cigarette without the use of a band.

Q What were some of those approaches?

A We looked at using lower porosity papers. We looked at using a different burn additive, monoammonium phosphate instead of citrate. We looked at reducing the overall length of the product and other size physical parameters.

Q Was the circumference of the cigarette rod something that was investigated?

A Not as a -- it was looked at because reducing the circumference reduces the mass burn rate. In general, the objective was to not affect the physical appearance of the product, as well as the taste.

Q And the lower porosity paper would change the appearance of the cigarette?

A No. The lower porosity paper would not change its overall appearance.

Q Okay. Why was the banded paper design ultimately chosen to commercialize and market as opposed to these other design considerations you've described?

A I can't really answer that. I wasn't involved in that decision. But the banded paper

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

offers us all -- we meet all the objectives of the project in terms of not altering the appearance or the taste characteristics or the tar delivery of the product.

Q Is it your understanding that the PaperSelect product creates a cigarette that is self-extinguishing?

A It can, yes. It can create a self-extinguishing cigarette.

Q And do you know how long a cigarette will burn statically with the PaperSelect or banded product before it self-extinguishes?

A No, I can't -- no, I can't give you a specific time.

Q Is the banded paper product that's currently being commercially sold by Philip Morris a product that will prevent fires in real world situations, like in homes, automobiles, offices?

MR. CRAMPTON: Objection. Foundation. You may answer.

THE DEPONENT: Oh, sorry.

A I have no idea how it would perform under those situations.

BY MR. GRISHAM:

Q Do you know what the banded paper product

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

that is currently being marked is intended to provide in terms of reduced fire potential?

A Could you restate that?

Q What are the benefits that the PaperSelect banded paper are intended to provide in terms of fire potential?

A The banded paper is evaluated against a specific test, and those tests and its performances is based on the outcomes of those tests.

So in that frame of reference, it offers a reduction in the ignition propensity measured by that test.

Q Do you know how that correlates to reduced ignition propensity in homes, automobiles and offices?

A No, I don't.

Q Was the banded paper product developed at Philip Morris with the specific intent to meet the NIST standards?

A That was the only test available to us to use to evaluate our progress in the project.

Q Ultimately, did the NIST test boil down to a mass burn rate test, measure or test?

A No, I don't think so.

Q What are the NIST tests?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A It consists of taking a NIST test of a single cigarette and placing it on a -- a mockup which consists of a layer of foam and a layer of film, polyethylene film, on top of the foam and a layer of cotton duck on top of that. A cigarette is placed on that substrate and monitored to see whether or not an ignition occurs.

Q Is it a pass/fail test, either ignition occurs or it doesn't?

A There weren't any specific criteria set up for pass or fail. We simply measured the number of ignitions for every prototype.

Q Was there also a measure of mass burn rate in that context?

A No.

Q Was there a measure of linear burn rate?

A No.

Q So, really, the only measure was whether it ignited the substrate or didn't ignite the substrate?

A Yes.

Q What was counted as an ignition?

A As I recall, the -- the tar or the burn pattern had to extend, I think it was, 10 millimeters from the side of the rod.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q And the goal, then, was to design a cigarette that would, under those circumstances, produce the least number of ignitions when tested?
A That was -- in the sense that that was the only thing we had to measure, ignition propensity, yes.
Q In order to test cigarettes, develop and test cigarette models to achieve fewer ignitions, were there any measurments taken of tested designs?
A Tar delivery, for example?
Q No. Really what I'm referring to is in working up a model or a design concept, were there mass burn rate measurments that were taken into consideration in determining whether that candidate would likely produce fewer ignitions on the NIST testing?
A Not in -- not specifically. Because it's very difficult to measure mass burn rate in such a small area in the band or to calculate, really can't even measure it. I mean, you calculate it based on the time it takes to go through that band. So it -- really, the ultimate driver was its performance on the test as to whether or not a particular design was a good one.
Q Now, Philip Morris did conduct tests in

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

which the burn rate of -- mass burn rate of the cigarette was measured outside the bands and inside the bands, didn't it?

A Can you say that again?

Q Sure. Didn't Philip Morris conduct mass burn rate testing to determine the mass burn rate outside of the bands and inside the bands?

A Yeah, I believe they tried to measure the rate of burn outside of the band as well as in the band itself.

Q And to correlate that to the number of ignitions?

A That I'm not sure of.

Q Now, let's talk about the PaperSelect, the banded paper product that is in commercial production today.

You mentioned that you had worked on the design of the base sheets and the overall concept of the design of that product; correct?

A Yes.

Q Now, the PaperSelect product has how many bands incorporated into the rod of the cigarette?

A The number of bands would depend on the rod length.

Q Can you give me what the formula is for

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

that?
A Well, in general, there would be a minimum of two bands. And because of the spacing between those bands, which is about 21 millimeters, and that would -- if you have a long cigarette, like a 120s, you would end up with more bands on that rod.
Q What is the goal of reducing the burn -- the time between bands? Is there a way to measure that? I mean, is there a goal that is hoped to be achieved by the 21 millimeter spacing?
A The goal is not to have an ignition occur in between the bands.
Q Okay.
A Yes.
Q And I assume that that 21 millimeter spacing was arrived at based upon some criteria or testing?
A Yes.
Q And what is that criteria or testing?
A That was based upon a series of samples that were done in a variety of band widths -- I'm sorry, band spacings.
Q The next question, then, is what is the width of the particular band that is used on the PaperSelect product?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A My understanding is about 6 and a half millimeters.
Q Was that, likewise, determined through a series of tests, of whether or not an ignition occurred on the particular substrate, you described earlier as the NIST type testing?
A Yes.
Q When did the NIST test standard become known to Philip Morris?
A I couldn't tell you the exact date.
Q Can you tell me within a range of two to three years?
A No. In general, there -- I was aware of a NIST type test when I became involved in the program. We didn't have the ability to conduct that test at that time.
Q Why not?
A I really don't know. I wasn't involved in that aspect of the program, doing the actual ignition testing. I don't know the particulars of why it wasn't available any sooner.
Q When you became involved in the program in 1989, you were aware of some NIST type testing at Philip Morris?
A Well, I was aware that there was such a

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

thing as a NIST test. But it wasn't available at that time.

Q Wasn't available to whom?

A It wasn't available to the project.

Q And do you know why not?

A No, I don't know. I don't know the particulars around that.

Q But at some time the testing protocol became available to use at Philip Morris that you described as substrate of foam and film and cotton duck?

A Yes.

Q Do you remember about when that was?

A Again, I don't know specifically. I would say probably in the early '90s.

Q Okay. Back to the PaperSelect.

What is the design of the base paper?

A That would depend -- that would depend on the product that its going to be put on. There's more than one base paper.

Q Okay. Do the use of these bands work, regardless of the base paper that is used?

A Yes.

Q So you could use a flax paper in one instance and a wood pulp in another instance, and the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

bands would still work to achieve the overall goal?
A Well, in theory, yes. I didn't work with wood pulp, per se.
Q Okay. Are there any Philip Morris products that use wood pulp in the paper?
A I believe there are today. But our plan was to consolidate everything to flax with the incorporation of the bands.
Q Is the type of base paper used something that affects the flavor of the cigarette?
A It can have an impact, yes.
Q Is it something that can affect the burn rate?
A Yes.
Q What work did you do particularly in designing the base paper for the PaperSelect project?
A Well, the difficulty was when you put the bands on the current base sheet on any given product, the tar delivery and the puff count would increase. So the challenge was to develop a base sheet to bring both the tar delivery and puff count down to what their current levels are.
My involvement was trying to determine what that base sheet needed to look like and what its targets needed to be in order to accomplish that

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

goal.

MR. GRISHAM: We need to take a break here.

(Recess.)

BY MR. GRISHAM:

Q Ms. Newman, in your work to determine what was needed to change the base paper in order to bring down the tar and other deliveries for incorporation of the bands on the base paper, what research did you do?

A We produced experimental papers and placed bands on those papers and measured their performance on prototypes.

Q Did you do that in collaboration with any other companies?

A The paper was made at Schweitzer Mauduit's facility.

Q About when was that?

A Extended over a period probably beginning in the early '90s. Again, I don't recall exactly what date the initial papers were made.

Q How were the bands attached to the paper in those Schweitzer experimental cigarettes?

A They're incorporated into the base sheet at the wet end so that they're actually part of the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

base paper as opposed to put on the paper after it's warmed.

Q Was the desired goal for the banded paper project to have a band applied at the wet end of the application?

A Yes.

Q What changes were made between 1989 and the introduction of PaperSelect in the year 2000 to achieve the goal in tar and delivery that was desired?

A I'm not sure I understand what you're asking.

Q The PaperSelect product that was introduced in 2000 on the Merit cigarettes, I'm assuming, had tar delivery and other deliveries that were acceptable; correct?

A Yes.

Q What was done to the base paper to achieve that result?

A The base paper -- new base papers were designed, and they had higher porosity than previously used base papers.

Q How was the higher porosity achieved?

A Through -- well, that's a complicated question.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Refining of the flax fibers, the fiber length, primarily, to open up the base paper but still make an acceptable quality paper, one that wouldn't break.

Q So the porosity was increased. And were the additives changed, the burn promoters or other additives to the paper?

A At the time I was working on it, we used the citrate on the papers, as had been done in the past. The target level for the citrate was lower than many of the papers had been used in the past. It was approximately 1 percent.

Q Okay. Is the only difference in the base paper, the PaperSelect paper and base papers, for instance, that were used in 1989 on the Merit, the higher porosity that you had described a moment ago to me?

A The higher porosity and the lower level of citrate.

The difficulty with those base papers was being able to make a good quality paper at such high porosity. It's not something previously achieved.

Q Okay. But, ultimately, PaperSelect base paper was made with higher porosity paper and lower citrate additives?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q And there really were no other changes?
A That's right.
Q And so to achieve a desirable product, those two parameters -- or those two changes to the base paper were acceptable from a subjective standpoint and a toxicity standpoint?
A In general, yes. I mean, I can't make the statement that they're acceptable on all products across the board, because they haven't been evaluated. But for the designs that we looked at, they were believed to be acceptable, yes.
Q And the higher porosity you mentioned a moment ago for the base paper was achieved through modifications to the flax content?
A Yes. And I'm sure there's other things, particulars that were done at the mill that, you know, I can't address. But --
Q But that is something that researchers, such as you, got the Schweitzer people to do at the mill --
A Yes.
Q -- who make the paper?
A Yes.
Q In 1989 or '90 or '91 when you were

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

working on this project and if it was decided at Philip Morris that you wanted to look at or test a different makeup of paper, could you order it from Schweitzer with the specifications that you wanted?

A Well, it's not -- wouldn't be as simple as just simply ordering it. You would have to conduct a trial to try and make this paper.

Q Would that be something that Philip Morris would do or that the papermaker would do?

A It would be done in conjunction. Philip Morris people would attend the trial to make the paper.

Q Were there trials conducted at Beloit for that particular purpose?

A Not that I know of. I'm not familiar with that.

Q Are you familiar with the Gilford trials?

A No.

Q Are you familiar with the paper research done at the University of Maine?

A Only that there was some research done at Maine in the very early stages of the program.

Q All right. Back to the base paper.

The bands that ultimately were applied to this base paper that you've described, this flax

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

paper with the higher porosity and lower citrate, what were they made from?

A What were the papers made from?

Q The bands, paper bands?

A They were made from a mixture of cellulose -- the same materials that are in the paper, itself, cellulose and calcium carbonate.

Q So, essentially, then, it's the same -- the bands are made of the same thing as the base paper, and what they end up doing is just concentrating more cellulose in the banded area; is that true?

A Yes.

Q And that has the effect of slowing down the mass burn rate when the coal reaches the banded area; correct?

A It -- well, it has the effect of slowing down the coal, yes. It lowers the permeability of that particular -- the banded region. So you have an oxygen depravation situation.

Q When you reduce the oxygen, the tendency to self-extinguish increases?

A Yes.

Q How are the paper bands attached to the base paper in the PaperSelect program?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A They're not attached. They're applied when the paper is still wet, in the wet end so that --

Q Is that something that's done by the papermaker or by Philip Morris?

A Yes, that's done by -- on the paper machine.

Q And paper -- paper that Philip Morris uses for its wrappers have been, for many years, purchased from different outside vendors; correct?

A Yes.

Q Ecusta, Kimberly Clark, Schweitzer are some of the vendors?

A Yes.

Q And in the course of your work on the banded paper concept, are you aware of different research and trials conducted with different paper vendors?

A The only thing I'm aware of is a trial that was conducted in France with PDM, which is a division of Schweitzer Mauduit.

Q What were those trials aimed at determining?

A Again, to try and make banded paper at their facility to see if it could be made.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q Was there a particular city that those were conducted in or, otherwise, a name for those trials?
A Not that I know of.
Q When were those trials conducted?
A I don't know the specific year. In the '90s.
Q Have you heard of the Munising trials?
A Munising?
Q Yes.
A Yes.
Q Do you know what those were?
A That was to look at a different type of technology, a gravure printing technology as a means of applying bands to a paper.
Q Now, during the time that you worked on the banded paper concept, there were various means investigated to attach or incorporate the bands into the paper; correct?
A Yes.
Q Are you familiar with research that the paper manufacturers, themselves, were conducting in that area?
A I'm aware that there was some activity. We did get a look at some papers that were made by

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Schweitzer. Beyond Schweitzer, I'm not aware of what else might have been going on with other vendors.

Q Were you familiar with the process that was investigated for roto-gravure printing of bands on paper?

A That -- yes. That's the printing I mentioned earlier.

Q Okay. And that was a means of impregnating the bands into the paper at the wet end, wasn't it?

A No, that was -- that was applying the band to an already-formed paper.

Q Was it a form of strip application or a form of applying a slurry to the already-formed paper?

A I never saw the operation, but I believe it was -- it was some sort of a slurry or semi-solid type application. I don't know details.

Q Was that procedure successful in applying workable bands to paper?

A They were able to put bands on paper, yes.

Q Was there -- were those bands something that would achieve the goals of Project Tomorrow?

A The -- the issue that I recall with them

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

was taste. If I remember correctly, there was CMC included in that mixture that was put on the band, and they were not as desirable in terms of taste or subjective parameters as compared to the -- the wet end application.

Q And who conducted the subjective tests to determine that they were less subjectively acceptable?

A That would have been internal panels.

Q What is POL testing?

A POL stands for product opinion laboratory, and that's a test that's conducted with a sublime product test. A prototype is sent out to consumers for evaluation.

Q Was it your understanding that in order for a product concept to achieve the goals of Project Tomorrow that it had to have a subjective component that was no different than a cigarette model that was currently being marketed?

A The goal was to -- the goal was to achieve equal subjective performance to a current product, yes.

Q Had to be -- had to be no different; there had to be no difference in the subjectives?

A That's right.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Did the gravure printing method have any adverse effects on deliveries, to your recollection?
A As I recall, there was a significant increase in tar delivery and puff count with those bands.
Q Were there means of dealing with increased tar deliveries and puff count at the time the gravure printing method was being evaluated?
A No. Excuse me. No, we didn't have a means.
Q Were there means of dealing with the flavor issues that you described a moment ago?
A Not that I'm aware of.
Q Did you do any work in the flavor issue component of the banded paper design?
A Can you -- exactly what do you mean by "flavor issue"?
Q Well, a moment ago you mentioned that there were some flavor problems with the gravure printing method. And I'm assuming, then, that became an issue with that particular design methodology. And I was wondering if you worked on that issue?
A We looked at the possibility of removing the CMC from that particular material to help improve subjectives.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q Was the base paper varied with regard to the different printing methods? In other words, did you use a -- one type of base paper for one printing method and another for another?

A At the time that we looked at gravure printing, we did not have the higher base -- the higher porosity base papers developed. So my recollection is we looked at it on existing base papers.

Q The higher porosity base papers that you're familiar with in the PaperSelect or Tomorrow paper, how are those different from the higher porosity papers that were developed by Philip Morris in the 1980s?

A Well, these were much higher porosity papers than had been used in the '80s.

Q Okay. Were the paper -- base papers that were incorporated into the PaperSelect program higher porosity than, say, a Marlboro paper from 1994?

A Yes. Yes.

Q Are you familiar with the moving orifice device as a means of applying bands to base paper?

A Yes.

Q Is that the technology that was ultimately used to place the cellulose band onto the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

base paper --
A Yes.
Q -- of the project -- PaperSelect project?
A Yes, it is.
Q Who developed the moving orifice device as a means of applying these bands to the base paper?
A Well, it was a joint effort. It was Philip Morris, in conjunction with Schweitzer Mauduit, in order to put it on a paper machine.
Q Does the PaperSelect product that is currently being marketed on the Merit brand, at least that I'm aware of, is it capable of being manufactured at commercial speeds?
A I'm not sure I can answer that accurately since I haven't been involved in it now for a year and a half. But I know they're having some difficulties in producing that paper.
Q Is the difficulty in the production of the paper or in the use of the paper in cigarette making?
A The difficulty is in production of the paper.
Q Is there any difficulty in cigarette making with that particular paper?
A Not that I'm aware of.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q What is your understanding of the difficulty in making of the paper?
A Simply making a sheet that's strong enough not to break on the machine and consistent in terms of its porosity.
Q How is that being dealt with on the commercial product that's currently being marketed with the PaperSelect?
A Again, I don't know. I haven't been involved in it for over a year now.
Q So at the time PaperSelect was brought onto market, you were already -- you had completed your work on it?
A Yes.
Q How did the moving orifice device work to apply bands to paper?
A I can't give you an engineering explanation. It's a rotating belt that has slots in it where the slurry is deposited on the paper as it's moving across the web.
Q Now, the flax paper, the higher porosity flax paper that makes up the base paper for the PaperSelect and then the cellulose bands that are applied to the base paper, what effect did those have on the tobacco blend and the formulation of the paper

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

in terms of flavor and subjectives?
A They did not have any effect on the tobacco blend.
Q Okay. So using the banded paper and PaperSelect didn't cause Philip Morris to have to change the blend of the tobacco or formula for their tobacco?
A No.
Q And the subjectives and the deliveries were all the same?
A That was the goal of the models that we made, yes.
Q Would it be accurate to state, then, that if one could take a sheet of -- or a roll, a bobbin of PaperSelect paper from today back to 1990 and wrap a product -- a cigarette with that PaperSelect that the subjectives would be acceptable, and the deliveries would be acceptable?
A I can't say that conclusively. There are changes that occur to products throughout -- as a normal course of action, crop years change and so forth. I can't say that.
Q But, really, from just a regular cigarette that existed in 1990 compared to the PaperSelect paper used on the Merit, the only real

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

change is in the paper; is that a fair statement?
A Yes.
Q The filter -- the filter could be the same, and the tobacco blend could be the same?
A Yes.
Q And the subjectives would be just as acceptable as they would have been in 1990, and the deliveries would be just as acceptable as they would have been in 1990?
A Well, I can't -- again, I can't make a statement on the subjectives.
Q And why not?
A And the deliveries probably were different in 1990 than they are today.
Q Okay. Point I'm making is, in order to incorporate PaperSelect as a modification to the cigarette that Philip Morris produces didn't require any changes in the tobacco blend or the filtration of the cigarette; correct?
A That was the goal of the program, that it would be a paper change.
Q Paper change only.
A Right.
Q I understand that each year with crops that are different there have -- the blend and the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

flavor has to be tweaked; correct?
A It can be. Deliveries can go up and down according to the crop year changes which might require a base paper change.
Q So every year Philip Morris would have to make some alteration to either the tobacco blend or the paper to account for year-to-year crop changes?
A Well, not necessarily. What I'm saying is that it can have an effect on tar deliveries as crop year changes.
Q In your -- within your knowledge, I guess from the beginning -- what, 1989? -- concerning the design cigarettes as it relates to the paper of the cigarette, have you seen instances in which a year-to-year design change, either in paper or blend, would have to be made to account for crop differences?
A I have seen instances where changes had to be made to a product as a result of deliveries moving as a result of a crop year change, yes.
Q And is that something that could be accomplished in a relatively short period of time?
A That depends on the nature of the product affected.
Q Well, do you recall any products, Philip

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Morris products being pulled from production because there was a delivery change that couldn't be dealt with?

A No.

Q As a researcher in 1989, for instance, if you were told that because of year-to-year crop differentials the tar deliveries were a little high, what would be done to address that?

A Well, the construction of the cigarette would be examined to see what needed to be changed to bring the delivery back into line.

Q And what might those changes be?

A It might be a filter ventilation modification or a filter efficiency modification or a cigarette paper modification I would say is probably the main areas.

Q Would the same analysis -- or could the same analysis be done for other subjective or delivery components, such as total particulate matter, carbon monoxide, other aspects of the toxicity of the cigarette that might be tested?

I know we used tar as an example. But what I'm getting at, were there other modifications to the filter or paper or tobacco blend that could be made if there were other changes, year-to-year crop

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

changes in the tobacco?
A I'm not sure I follow your question.
Q Yes. Okay. I understand that, as an example, tar might increase on a year-to-year basis or decrease because of crop changes and that those would be dealt with through an examination of the cigarette and perhaps changes to the filter or the paper.
Were there other aspects of delivery that could, likewise, have been dealt with, in addition to tar, which is an example you and I used?
A Tar is the parameter that's routinely monitored. So I don't know what other parameters you might be referring to.
Q Okay. Total particulate matter?
A Well, that goes hand in hand with tar.
Q Okay. CO?
A CO's not routinely monitored.
Q Back to the PaperSelect for a moment.
You've talked with us about the gravure printing method. Do you recall an inkjet method, application method being examined as well?
A No, I don't. I recall the terminology, but I don't recall that -- I don't recall that during my time on the project.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Q Generally, how are flavor modifications made to improve subjectives?
A You mean flavor changes?
Q Modifications, changes, alterations.
A What we typically focus on is tar per puff as an indicator of strength and liking.
Q What is the most desirable and efficient way to adjust the tar per puff?
A There is no one -- one way, most desirable way.
Q What are all of the ways to alter the tars per puff that you're aware of?
A Ventilation, filter ventilation will change the tar per puff.
Q Okay. What else?
A Filter efficiency changes.
Q Okay. Anything else?
A I'd say those are the main -- main categories.
Q How is it that the commercial brands with the PaperSelect paper were able to maintain appropriate levels of subjective quality and delivery without changes in the blend or the filter?
A Because the nature of it is a paper change. So by redesigning the base paper to

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

compensate for the increases in delivery due to the bands, you're able to move the delivery and the puff count in the same direction. So you maintain that tar-per-puff relationship.

Q Okay. And so, thus -- I'm trying to get my understanding here up just a little bit, Ms. Newman.

What had to be done for the PaperSelect project, then, was, understanding that the bands were going to be denser and less porous, the remainder of the base paper outside of the bands had to have higher porosity, which, when judged with one another, the bands and the rest of the base paper would make the puff count and the tar delivery both go down?

A No, it would -- ultimately, it would make the puff count and the tar delivery the same as the product without the band.

Q Okay. But the concept is correct that because the bands are denser and less porous, the remainder of the base paper had to have higher porosity?

A Yes.

Q Okay. And that achieved the desired result?

A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q So back with -- in considering some of the other designs, such as roto-gravure printing or strip applications, those concepts of band use, without changing the rest of the base paper, would have been unacceptable because the puff count would have been higher and the tar delivery higher?

A Yes. Any -- any zone application that would increase the delivery and the puff count would have to be compensated for in order to return to the normal levels.

Q Okay. Now, before the development of the base paper that you've described with the higher porosity, what means were used to produce papers with different porosities?

A I'm sorry. Can you say that again? Prior to --

Q Sure. The base paper that is in use now on the PaperSelect product was developed about when?

A Well, in all fairness, it's still being worked on because there are issues with the production of the paper. So it -- late 1990s is when we were first able to produce some acceptable sheets, base sheets.

Q And by "acceptable sheets," you're referring to sheets that had the correct base paper

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

specifications?
A Yes.
Q And would you agree that today there are millions of cigarettes that are being made with the PaperSelect each day?
A That I -- I really don't know what the production schedule is.
Q You know that the PaperSelect is a paper that's in use on a commercial cigarette that Philip Morris is selling in stores?
A Yes.
Q Before the development of the method that you described in the late 1990s for making this base paper with higher porosity, let's say ten years before, say in like 1989, what means were there of producing papers with different porosities?
A Well, the standard papermaking operation at Schweitzer could typically produce up to 46 Coresta porosity. That was the highest porosity that we were using.
Q Did that mean higher porosities couldn't be produced or that that was the highest that was needed for Philip Morris cigarettes?
A That was the highest that they were capable of producing.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Why is that?
A Because of the way their operation is set up, they have great difficulty in producing a higher porosity paper, given the level of refinement in their system within the mill.
Q Were there other manufacturers in 1989, for instance, that had different procedures or setups that would enable them to create papers with higher porosities?
A Not that I know of, no.
Q How was the -- how was the difference in porosity manipulated between the highest that was available by Schweitzer or Kimberly Clark or Ecusta and the lowest that was available?
A I believe that, primarily, it's the refinement of the flax fibers that allows them to achieve that range of paper porosities.
Q How was the refinement altered? Some being very refined, some being less refined, how was that difference achieved?
A They actually have machines that they call refiners, and it literally cuts up the flax to achieve different fiber lengths.
Q Okay. So the shorter the fiber length -- and I assume this is microscopic; correct?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q And the shorter the fiber length, the more refined, then, the paper?
A Yes.
Q And the shorter the fiber length and more refined the paper, the higher the porosity?
A In general, I think so. I'm not an expert on their facility.
Q Using 1989 as an example year again, because that's one of the years you began to work on the Project Tomorrow, focusing on 1989, during that time period was there any application for a higher porosity paper, higher than the highest that Schweitzer made, for instance?
A No, not that I know of.
Q And had -- in 1989 when Philip Morris was producing Marlboro cigarettes, for instance, had a higher porosity paper than Schweitzer was able to -- or was developing at that time been used, what effect would that have had on the cigarette?
A If -- you're saying if Marlboro were running a lower porosity paper so --
Q A much higher porosity paper.
A It would reduce the delivery and the puff count.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q It would dilute it very much, wouldn't it?
A Yes.
Q And had, in 1989, cigarette papers that Schweitzer or anyone else was producing had the very high porosity that ultimately was used in the base paper for PaperSelect, what would have been the result without bands would have been a paper that produced a very diluted cigarette?
A Yes.
Q Which would have been subjectively not desirable.
A Well, it would not have met the tar delivery targets.
Q And, thus, it wouldn't have been something people would have wanted to buy and smoke.
A No. It would not have been the current Marlboro.
Q Back in the 1980s, you were familiar with, I assume, novelty cigarettes like Nat Sherman's that had very low porosity paper; correct?
A No, I'm not familiar with Nat Sherman's.
Q Are you familiar with any novelty cigarettes that existed at any time prior to the PaperSelect base paper being developed that had very

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

high porosities, for any reason?
A No. No.
Q Do you know what process or developmental change was required to produce the more greatly refined fibers for the paper with increased porosity?
A No. I don't have all the details on the process development. I was involved with the product. That's another whole aspect of the project.
Q Are you familiar with the concept of Greiner measurments?
A Yes.
Q What are those measurments?
A Greiner is a measure of porosity. It's an older technique, usually measured -- it's reported in seconds.
Q And at some point Philip Morris, at least, as a producer -- commercial producer of cigarettes, began to refer less to Greiner measurments of porosity and more to Coresta units; correct?
A Yes.
Q Let's take a moment here just to clear that up.
The Greiner measurements was a porosity measurement that dealt in -- in porosity per second,

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

is that what you were saying?
A That was the reported unit, seconds.
Q And Coresta was units?
A Uh-huh.
Q Can you describe the differences between each unit of measure?
A Well, I think Coresta has been the more widely accepted technique, which is why we eventually moved towards it. I can't recall the exact procedure of how you measure Greiner versus Coresta. And the Coresta's measurement is the air flow through the paper. Greiner was also air flow but measured in seconds.
Q Is Coresta amount of air flow?
A Yes.
Q And Greiner was a certain air flow in terms of time?
A Yes.
Q Okay. The PaperSelect base paper that we've been talking about has, I assume, a measurable porosity in Coresta units that you're familiar with?
A Yes.
Q What is that unit -- Coresta unit measurement?
A There are several base papers.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Okay. You mean in the Merit brand, for instance, there's several different base papers that are used?
A Yes.
Q Why so?
A Because each brand has a different tar delivery target or different construction.
Q Within the Merits, themselves?
A The Merit family.
Q Oh, okay. That's where I wasn't understanding.
Okay. So -- but if I went and bought a package of Merit cigarettes, they should all have the same Coresta unit paper porosity?
A Yes, for any given brand within the family.
Q Okay. But I may -- what's another brand we can use as an example that has PaperSelect?
MR. CRAMPTON: Are you talking about within the Merit family?
MR. GRISHAM: Yes.
A Well, you have Merit Regular. You have Merit Ultra Lights. And you have Merit Ultima.
BY MR. GRISHAM:
Q Okay. So those three different Merits

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Stanford Libraries industrydocuments.ucsf.edu/docs/lfhl0001

would have paper -- base paper that had different Coresta porosity measurments?
A Yes.
Q Okay. And the PaperSelect, the banded paper product, can you tell me what the base paper Coresta measurement is for that product?
A Well, again, it depends on which brand.
Q Okay. Is there a finite number? I mean, is there like five or eight?
A Oh. There are -- the papers that I was working on designing were approximately 60 Coresta, 80 Coresta and 100 Coresta.
Q 60, 80 and 100.
A Uh-huh.
Q Of the PaperSelect Merit brands that are currently in production, are there some that have 60, some that have 80 and some that have 100s today?
A That I don't know exactly, because the design was finished after I left. But I would believe -- I'm sure -- I'm certain there are some different base papers. I can't tell you which one is on which version.
Q What would a 60 Coresta base paper measurement be in Greiner units?
A What's 552 divided by 60?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Do what?
A Have you got a calculator?
Q 552 divided by 60?
A Yeah. 9.2.
Q All right. So, essentially, we could take 60 or 80 or 100 and divide it into 552, and that would be the approximate conversion?
A 552 is divided by 60, 80 or 100 would be approximately.
Q Okay. We talked about printing -- the gravure printing method, and I think I brought up inkjets brand. You said you weren't really familiar -- you've heard of that but weren't familiar with it?
A Yes.
Q And we talked about the moving orifice device a bit, which is how the PaperSelect is made today; correct?
A Yes.
Q I want to talk a minute about strip application and calendaring methods of applying bands. Did you ever work on those two concepts?
A I didn't specifically work on that. I'm aware that there were others looking at calendaring and strip application.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Do you recall what problems, if any, were associated with that design concept?
A Well, my knowledge of strip application was literally gluing pieces of paper onto existing paper. So that would present a tremendous challenge to be able to make a commercial paper that way.
Q Okay. Do you recall doing any work on the calendaring concept?
A Not -- no. I know that that was looked at by people within the paper development area. Beyond that, no, I couldn't tell you.
Q The PaperSelect brands that are being marketed today, does that paper come from the vendor in big rolls or bobbins?
A Yes. It comes in bobbins.
Q And those -- do you know of any problems with that paper working on Philip Morris' papermaking machines?
MR. CRAMPTON: Objection. "Papermaking machines" is vague.
BY MR. GRISHAM:
Q I'm sorry. Cigarette-making machines.
A No, I'm not aware of any problems.
Q Are you familiar with the Spotswood, New Jersey, papermaking facility?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q Was that a Kimberly Clark facility -- or is that a Kimberly Clark facility?
A Yes. They're called Schweitzer Mauduit now, but it's the same company.
Q Same company? Is that where the PaperSelect paper is currently made and manufactured?
A Yes. Yes, it is.
Q Do you know when modifications were made at the Spotswood plant for the production of the banded paper product?
A It was an ongoing development, as was product development. I don't know exactly the dates. During the 1990s.
Q Now, during the development of the banded paper, regardless of how it was applied, was there subjective testing done with panels of individuals, like this POL testing we talked about, throughout the '90s?
A There was -- there were several POL tests conducted on banded paper, yes.
Q Once again, the goal was to have the panelists not find any difference between the control cigarette and the experimental cigarette?
A That's correct.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

Q Do you know if there was any analysis done to determine what the effect would be on market share of any particular brand if there was some difference in the control and the experimental cigarette on any of the POL testing?
A No.
Q If we weren't discussing or researching this idea of banded paper -- and let's just assume that, again, it's 1989 again -- and because of crop year differentials, did Philip Morris do any POL testing on any brands?
A As related to ignition propensity?
Q No.
A Or just in general?
Q In general.
A I'm certain they did POL testing. It's a common method that's used to evaluate all sorts of changes.
Q Yeah. Were POL tests used as a means to determine whether or not any changes that were brought about because of crop differentials, for instance, were enough to create such a subjective difference that people could tell?
A There are POL tests done to evaluate blend type changes, but it's -- it would usually be

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

after the fact, because, I mean, crops are -- by definition, there is crop rotation. So it's not something you can decide not to do.

Q Right. How does one in the cigarette-making business ensure that the Marlboro will taste the same next year that it tastes today? It can't -- the tobacco is what the tobacco is; right?

A Right. By closely monitoring it.

Q How is that monitoring done?

A Well, our leaf department has its own panel, and they certainly do a lot of that evaluation within the leaf department.

Q Okay. So a lot of the testing is done by Philip Morris employees to make sure there's a consistency from product year to product year?

A Yes.

Q But POL testing, per se, is not done for that purpose?

A Not -- well, POL testing has been done to evaluate blend type changes.

Q Okay. And I guess what I'm searching for here is, every crop year is there a set of POL testing done to evaluate, even after the fact, to determine whether or not there's a subjective

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

difference?
A You mean as a matter of course?
Q Yes.
A Oh. No, I don't think so.
Q Is that monitoring done by measuring the tar per puff?
A Well, it's done by measuring just subjective qualities, in general.
MR. CRAMPTON: Are you talking about POL testing now? You're talking about some other --
MR. GRISHAM: I was talking about flavor testing, in general, like panel testing.
A Panel testing -- internal panel testing is done by making up cigarettes with whatever the blend is and subjectively evaluating them.
BY MR. GRISHAM:
Q So that would be like giving the panelists an unmarked cigarette that would be the control and giving them one or more experimentals and asking them to smoke them and grade them in accordance with certain categories?
A Yes.
Q And that is -- that sort of panel flavor testing is something that's done in order to monitor these year-to-year changes?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q Are you aware of circumstances in the past when there has been a subjective change in a particular brand because of crop rotation?
A I can't give you a specific example. I'm aware that, in general, it has been -- it has been seen to have an impact.
Q And is the impact ultimately seen on the subjective analysis, or are you talking about, ultimately, out in the public?
A Subjective analysis, sometimes it can have an impact on tar deliveries, which would be an analytical evaluation.
Q Okay. What I'm getting at, though, is are you aware of subjective changes that have been brought about because of crop rotation or other -- other changes outside the control of the manufacturer that ultimately have created changes that the consumer could detect?
A I don't know, because I don't usually -- I don't have access to those sales data. I don't know how much has or has not been detected by the consumer.
Q Is it true that if a blend or flavor change is to be made to alter a subjective quality

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

that from time to time that's implemented over a course of years to lessen the impact?

A Wherever possible, yes.

Q Can you give me an example of that having been done?

A Well, crop rotations are kind of a gradual process unto itself, to try to minimize that type of impact.

Q And the hope, then, is if the changes are subtle and over a long enough period of time, the consumer won't notice a big difference in the product quality?

A Yes.

Q Now, through some of the documents that we've been provided in discovery in this case, there's a reference to different phases of the project known as Tomorrow. Are you aware of various phases?

A I recall that terminology in the early days, yes.

Q Do you recall, likewise, what the different phases were?

A As I remember, it was linked to mass burn rate, reductions in mass burn rate. I don't recall exact levels for each phase.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q So the different phases of Tomorrow, then, were to incrementally take the mass burn rate down?
A That was -- that was how it was structured at the time.
Q How was that reduction in mass burn rate achieved from phase to phase?
A Well, it wasn't at the time. It was simply a -- the assumption was that to go from where products currently are today to a much reduced mass burn rate would be a dramatic change. So that was the reason for pursuing a phase type approach. But those results were never really achieved.
Q Do you recall being involved in some testing of lower mass burn rate versions of otherwise commercial brands?
MR. CRAMPTON: What kind of testing?
MR. GRISHAM: I'm sorry?
MR. CRAMPTON: What kind of testing are you referring to?
MR. GRISHAM: Mass burn rate testing.
MR. CRAMPTON: All right.
A No.
(Mr. Waltman exited the room.)

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

(Newman Exhibit No. 4 was marked.)

BY MR. GRISHAM:

Q Are you familiar with Exhibit 4?

A I recognize it, yes.

Q How do you recognize it?

A Well, this is representative of a memo that was typically kind of a progress type memo that was written.

Q Okay. That would have been written at the time you were working on Tomorrow?

A Yes.

Q Okay. And the reason I show you and ask is, on the second page, your name is beside a category Benchmark and Target Date that has to do with designing, fabricating and testing some low mass burn rate cigarettes.

MR. CRAMPTON: Where are you in here?

MR. GRISHAM: Second page. I don't have another copy or I'd --

MR. CRAMPTON: You see where he is?

I didn't know if there was a question pending.

BY MR. GRISHAM:

Q Yeah, I thought I did.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Do you see -- do you see the area where as a benchmark and target date there is reference to designing, fabricating and testing cigarettes, low mass burn rate cigarettes?

A Yes.

Q Okay. Can you tell me what those tests referred to?

A If I'm looking at where you're looking, under B2?

Q Why don't you read what it says.

MR. CRAMPTON: Oh, you don't have a copy.

MR. GRISHAM: Right.

MR. CRAMPTON: Because I've pulled one out. I have one.

MR. GRISHAM: I don't need it. If she reads it, that will be fine. I've just got a couple of questions about it.

A Okay. Test 50, 45 and 40 milligram per minute versions with the MC panel.

BY MR. GRISHAM:

Q Okay. We're referring to something different.

MR. CRAMPTON: Here. Take this.

MR. GRISHAM: Thanks.

(Mr. Waltman entered the room.)

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

BY MR. GRISHAM:

Q I'm looking at page 2, the very last reference on page 2 that says Design, fabricate and test low MBR versions of selected current brands. And it has a parenthetical and then Newman and Easley, close parentheses, 4Q89. Is that where you were?

A Yes, I am now.

Q Okay. What low MBR versions of selected current brands were tested?

A This refers to testing on the MC panel. So this is subjective testing.

Q What is the MC panel?

A It's a -- it was a subjective panel set up in the manufacturing center composed of people who worked in the manufacturing center.

Q Were -- what, particularly, was being tested? It says low MBR. That's low mass burn rate; correct?

A Yes, low mass burn rate.

Q Were they then current existing brands which incorporated a low mass burn rate component to them?

A No.

Q What were they?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Well, they didn't exist, actually. I mean, this was written in May, so this was a plan to do this in the fourth quarter of '89.
Q Okay. Was that ever conducted?
A No.
Q Okay. Why not?
A Because we didn't have such prototypes.
Q Why was a set of tests planned if the prototypes would not ultimately exist?
A Well, the goal was to have them exist. And I don't recall testing -- that we ever got to the point of testing low mass burn rate versions of current brands on the MC panel.
Q And it's just because they never were made?
A Yes.
Q Why were they not made?
A I don't recall having been able to make acceptable versions of current brands that we would then evaluate on a panel.
Q Okay. Acceptable versions in terms of what?
A Meeting all the characteristics of delivery and passing, I guess, preliminary subjectives.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Who established those target -- benchmarks and target dates?
A They were -- the people working on the project established them. These were, really, goals, targets.
Q Okay. Were they goals that members of the project, including you, would establish for your team or group?
A Yes.
Q And did -- was it something that occurred often that you would set a goal that just couldn't be achieved for some reason?
A Yes.
Q Why do you think that is?
A Well, you plan for success. Our goal was to do this as we could -- as best we could. We didn't meet all of our target dates throughout the lifetime of the project. There's probably many memos like this at different time periods.
Q Okay. Was there ever, to your recollection, anything in the company culture or anything specifically directed from management of the company to prevent you or any other researcher from achieving a goal with regard to developing acceptable reduced ignition propensity cigarettes?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - https://industrydocuments.ucsf.edu/docs/lfhl0001

A No. We pursued this -- I always pursued this with -- to the best of my ability.

(Newman Exhibit No. 5 was marked.)

BY MR. GRISHAM:
Q I'm going to hand you what's been marked as Exhibit 5, your counsel first, of course.
MR. CRAMPTON: I think she's ready now.
BY MR. GRISHAM:
Q Do you recognize Exhibit 5?
A Yes.
Q What is Exhibit 5?
A This is a copy of a memo that would be produced from -- as a result of an internal subjective panel.
Q Was that a panel that tested some design parameters that you had developed?
A Yes.
Q What design parameters were those?
A In this particular test, it was reduced cut width in the filler and also one with monoammonium phosphate on the paper.
(Mr. Waltman exited the room.)
BY MR. GRISHAM:

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q By reduced cut width in the filler, you're referring to the fibers in the filler of the paper or the filler of the plug?
A No, I'm sorry, tobacco filler.
Q Okay. Did the panel find some subjective equality between the control and the experiment in any of those tests that you hold there in Exhibit 5?
A Let's see. It says test 1 seemed most promising, and test 2 and 3 were both unacceptable.
Q What was test 1 of?
MR. CRAMPTON: Are you having trouble reading it?
THE DEPONENT: Yeah, I'm having trouble seeing it.
MR. GRISHAM: I'm sorry.
MR. CRAMPTON: Results indicate that test number 2 and test number 3 were both unacceptable due to bitterness and harshness. Test number 1 seemed most promising.
BY MR. GRISHAM:
Q What was test number 1 of?
A Test number 1 was 20 cuts per inch, 16 second paper.
Q By "16 second paper" what is meant there?
A That's the Greiner measurement of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

porosity.
Q All right. What would 16 second paper relate to in Coresta units, roughly? Or exactly. You've got your calculator.
A 34.5.
Q What was the purpose of experimenting with reduced cuts per inch on the tobacco?
A Excuse me. It was felt that reducing the cut width would reduce -- could reduce mass burn rate and, therefore, might be a tool to reduce ignition propensity.
Q What happened to that concept?
A There was some testing done, some INBIFO, which is our facility to -- for toxicology evaluations. And my understanding is there were some issues with reduced cut width that came out on that testing.
Q Is that the testing facility in Germany?
A Yes.
(Mr. Waltman entered the room.)
BY MR. GRISHAM:
Q During the time that you worked on the banded paper project, do you recall instances in which a banded paper design would achieve equivalent subjectives between the control cigarette, whatever

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

it may have been, and the experimental banded product, in testing such as that testing that was conducted on Exhibit Number 5?

A Yes. As we got further along with the banded paper development, models began to look better and better under subjective testing.

Q Okay. And was that a function of anything that was done to the tobacco or the filter or a function of modifications, again, to the paper, base paper?

A It was the paper and changes to the band parameters, themselves.

Q Was there any experimentation conducted with altering the blends, in addition to altering the papers and the band width and spacing?

A Not that I recall, no. We looked at a variety of different commercial blends. I don't recall looking at blend changes in conjunction with banded papers.

Q What was the problem with models or design concepts that would incorporate bands on lower porosity paper, in terms of subjective quality or analytical properties?

A The problem with putting bands on lower porosity papers would have been the tar delivery

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

targets would not meet the tar delivery targets.
Q Which, as you've said earlier, would have also impacted flavor?
A Yes.
Q Are there other means through modifications, other than the paper, to affect the tar delivery properties of a cigarette?
A Yes.
Q What are those?
A Filter changes, ventilation changes, filter efficiency changes.
Q What about blend or type of tobacco?
A I suppose some really radical changes could be made to the blend to affect delivery, but you run into subjective differences at that point.
Q And what I was thinking of, particularly, was maybe expanded tobacco to be a diluted delivery cigarette.
A Yes. I mean, usually we have higher expanded tobacco content in our lower delivery products.
Q So what I was leading up to, then, is with the lower porosity paper, lower than what ultimately was used in PaperSelect, would the use of bands on that lower porosity paper and, thus, having

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library. industrydocuments.ucsf.edu/docs/lfhl0001

higher tar per puff, were there any other experiments done with either altering the filters, filter efficiencies, filter ventilation type of tobacco or blends in order to get that tar delivery down?

A No, I don't believe so. Because the goal of the banded paper program was to have it be in paper change only.

Q Well, assuming that the banded paper project could have been done by changes in the paper and changes in some other physical component of the cigarette that also met the goal, is there some reason why that wouldn't or couldn't have been adopted as a means of achieving the ultimate ends of Project Tomorrow?

MR. CRAMPTON: Object to the form. It's an assumption. You can answer.

A I would not assume that similar results could be achieved by changing other aspects of a design. Filter -- filter ventilation changes usually do have an impact on the taste.

BY MR. GRISHAM:

Q Are you saying that there -- that changes in other parameters could not have achieved the Project Tomorrow results?

A What I'm saying is that the most -- the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

highest likelihood of success is -- comes from just changing the paper. It's the least disruption of the system.

Q Okay.

A Okay.

(Newman Exhibit No. 6 was marked.)

BY MR. GRISHAM:

Q Do you recognize Exhibit Number 6?

A No.

Q You don't recognize the handwriting?

A No.

Q Do you remember the meeting that was the subject of Exhibit Number 6?

A No, I don't remember the exact meeting.

Q You notice that your name is at the top of the meeting?

A Yes.

Q Do you remember a presentation having been made regarding the subject that is outlined in the memo?

A No.

Q On Exhibit 3 we talked about the mission statement of Project Tomorrow.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Do you need to look at that some more?
A No, that's okay.
Q I didn't want to interrupt you if you had some other answer.
And it talks about the goals of Project Tomorrow, and it doesn't mention that you were restricted to a design change to the paper only. And a minute ago -- the reason I'm asking is a moment ago you said, look, our goal was to achieve this through the most minimal impact, and that is through the changes to the paper. And since it's not written on the mission statement, I was wondering how that goal was -- you were made aware of that goal, to limit the changes to the paper only?
A I don't recall exactly how, but I do know that when we were in banded paper development that was the goal, to minimize the disruption of the system, the whole system, and to accomplish the objectives through paper modifications only. I don't recall exactly how that was communicated.
Q Were you ever told that if the goal could be achieved by -- the goal of Project Tomorrow could be achieved by means that included modifications, other than the paper, that it wouldn't be an acceptable way to achieve the goal?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A No. If that's what it took, then that's what would have to be done.
Q Okay. What is Project Happen, H-A-P-P-E-N?
A Project Happen was the name of banded paper development back when Harry Lanzillotti was the project manager.
Q How was Project Happen different than from Project Tomorrow?
A It was not different, in the sense that it was the development of banded paper. As best I can recall, that name came into being when -- when Harry became the manager of the program. But I don't know exactly why it came into being. It was, essentially, the same project.
Q Okay. In the course of your work on the banded paper concept, did you visit any of the vendors' plants to observe manufacturing techniques or to conduct tests?
A No.

(Newman Exhibit No. 7 was marked.)

MR. CRAMPTON: Nice toss.
MR. GRISHAM: Thank you.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

MR. CRAMPTON: While she's looking at -- can we go off the record for just a second?

(Discussion off the record.)

BY MR. GRISHAM:

Q Ms. Newman, do you recognize Newman Exhibit Number 7?

A Yes.

Q What is Newman Exhibit Number 7?

A This is a copy of a memo written by Doug McRae regarding some testing that he did --

Q Okay.

A -- for the Munising trial paper.

Q All right. And, again, we talked earlier about the Munising trial. Do you -- does that memorandum refresh your recollection on what those trials were?

A The Munising trial was the gravure printing trials.

Q But, really, you don't remember anything else, other than that, about it?

A No.

Q Okay. What was your involvement with the tests or trials that were the subject of the memo marked as Exhibit 7?

A Judging by the codes listed here, looks

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

like prototypes were made -- cigarette prototypes were made with these papers and then were tested in his laboratory.

Q Mr. McRae's laboratory?

A Yes.

Q And who was he?

A He was on the research side of the project.

Q What were the parameters of the particular experimental models that are listed as codes on Exhibit Number 7?

A I can't really tell what -- what types of prototypes -- what the parameters were of these prototypes. It just lists the codes.

Q Okay. You don't remember what tests -- what different models were being tested there?

A No, not specifically.

Q Do you remember -- is there anything in that memo that would tell you generally what was being looked at?

A It looks as if this was -- they were attempting to measure linear burn rates inside the band.

Q Okay.

A And what effect that might have on

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

self-extinguishments.
Q Okay. Can I see it just a moment? I may have a couple more questions, and then we'll take a break. Thank you.
Do you remember seeing the results of the tests that were run on Exhibit Number 7 back during the time that you were working on the project in 1993?
A No, I don't specifically recall this test.
Q Do you remember any research that would have indicated to what level the linear burn rate would need to drop within the bands of a paper in order to achieve high incidents of extinguishment?
A No. This extinguishment he refers to is in free smolder.
Q Is that not a linear substrate?
A That's right.
Q Do you know why those tests were being run to determine the number of extinguishments during free smolder?
A Not specifically, other than just to try to understand that relationship of when a cigarette will go out when it's not on a substrate but in an ashtray type thing.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

MR. GRISHAM: Good place to stop?
MR. CRAMPTON: That's fine.
(Recess.)

(Newman Exhibit No. 8 was marked.)

BY MR. GRISHAM:
Q Ms. Newman, I'm going to hand you, through your counsel, Exhibit 8 to your deposition, give you a chance to review it and ask you some questions about it.
MR. GRISHAM: Bill, what I'm looking at, specifically, is going to be the attachment.
MR. CRAMPTON: Okay.
BY MR. GRISHAM:
Q I'm going to represent to you that that exhibit is part of some discovery that we have exchanged in this case. And there's an attachment to some interrogatories, which are sworn to and answered by Philip Morris.
Asking you to assume that, now I'm going to ask you some questions about it. Particularly, have you seen in the past a similar chart, whether it applied to the Marlboro 100 or some other cigarette?
A No.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q In reviewing the chart attached to Exhibit 8, are you able to understand the parameters in the chart?
A Yes.
Q And does the chart tell you what particular cigarette is being discussed and described from year to year in that chart?
A It says Marlboro 100 soft pack.
Q And what is the earliest year that information is provided about the Marlboro 100 soft pack on that chart?
A January 1980.
Q And in flipping several pages of that chart, can you tell me what the latest year is provided on that chart for the Marlboro 100 soft pack?
A September 1993.
Q Okay. Is one of the areas that is discussed in that chart the Coresta measurement from time to time from 1980 to 1993 of the Marlboro 100 soft pack?
A Yes.
Q Does it vary from time to time from 1980 to 1993 in its Coresta unit measurments?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Can you explain why there would be a variance from time to time from 1980 to 1993 in the Coresta unit measurments for that particular brand cigarette?
A I don't know for certain. There could have been a paper change occurred during this time period.
Q What is a reasonable explanation for why there would be a paper change during that time period?
A There could have been -- the tar delivery might have exceeded the specified value, for example.
Q Or, alternatively, the tar delivery could have been a little bit weak; correct?
A That's correct.
Q And so from time to time there would be an adjustment on the porosity of the paper used for the Marlboro 100 soft pack to compensate for either too much tar delivery or too little tar delivery?
A There could have been.
Q How is that Coresta measurement and, thus, porosity manipulated in the paper from time to time?
MR. CRAMPTON: Objection to the form.
A There are different papers available for

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

our use that have different target permeabilities. If that's what occurred during this period, it would be a different paper was used.

BY MR. GRISHAM:

Q Could I see the chart for a moment? I just want to take a couple of examples, and then I'll hand it back to you so you can verify it.

Assuming that on -- in January of 1980 for the Marlboro 100 soft pack the permeability/Coresta was 29 and assuming further that in March of 1985 it was 46, would that be a description in a significant paper change, or is that -- is that something that can be changed by just a slight variation of the paper?

A Well, the paper permeability will vary for any specific grading of paper. It's not always, for example, going to be 29 every time it's measured. So some variation in those numbers could simply be due to measurement differences at different points in time.

Q Well, is the Coresta measurement technique something that is supposed to be predictable and reproducible?

A Yes, to the extent that all -- all measurments, all techniques have some degree of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

error, instrument error.
What I'm saying is that some of that variation could have been -- it could have been the same paper, just it was measured at a different time, at a different sample of paper.

Q Is there a Coresta measuring machine?

A Yes.

Q How does it work?

A Just a piece of paper is placed in a holder and -- a clamp, and air is passed through the paper and is measured what the permeability is.

Q Is the air flow what's measured?

A Uh-huh.

Q Is that a yes?

A Yes.

Q Okay. And have you seen variations of 29 to, say, 46 Coresta units just because of the machine acting differently?

A Well, I've seen that variation -- I'm not saying it's being entirely due to machine variation. That would be one piece of it. But the paper, itself, has some variation within it. So it's possible that the combination of those two could give you a reading anywhere from 29 to 46 on the same grade of paper.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q And that difference wouldn't be something that would make the cigarette, ultimately, that used that wrapper or paper be not commercially marketable, would it?
A No.
Q During what time period were you aware of Philip Morris requesting papers with target Coresta unit measurments of 60, 80 and 100?
A It would have been in the '90s as part of the banded paper development program. I would say -- I can't give you a specific year, but it would have been mid-'90s, in that general time frame.
Q What particular manufacturer was that request directed to?
A We worked specifically with Schweitzer Mauduit.
Q And was Schweitzer at that time Kimberly Clark?
A No, I think they were Schweitzer at that time. I'm not sure.
Q All right. Do you know if the paper vendor, whichever it was, had to buy new equipment or modify existing equipment to produce the paper with the greater Coresta unit measurments?
A Yes. They're still, as I mentioned

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

earlier, working on producing that higher Coresta paper. There's been a great deal of new equipment bought and installed on their machinery to aid in that process.

Q Well, how are they making the paper that's used in PaperSelect that's being sold on the shelves of grocery stores today, for instance?

A I don't understand. How are they making it?

Q As I understand it, the Merit family of products that incorporates the PaperSelect is being sold across the United States today; is that true?

A I believe so, yes.

Q And that has a higher porosity base paper; correct?

A Yes.

Q And one of the paper vendors is providing that paper to Philip Morris to wrap its cigarettes in.

A That's right.

Q Are those vendors able to make mass quantities of that paper?

A They have been, yes, making production quantities.

Q In order to do that, have they had to

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

modify their machinery and equipment?
A Yes. There have been changes made to their equipment to better enable them to make the high permeability papers.
Q What changes are those?
A I cannot give you a list. That's really outside of my area of expertise.
Q Do you recall how long it was after the request to this particular vendor who Philip Morris requested to make that 60, 80 and 100 Coresta papers, how long it took them to comply with that request?
A They're -- today they're still working on complying with that request. My understanding is they still have difficulty in meeting the targets that we've set for those papers.
Q What targets are those?
A Targets in terms of trying to hold as tight a range in Coresta as possible; for example, control the variability in Coresta.
Q Well, when the concept was formulated to get these high porosity permeability papers, ultimately someone said make us up some bobbins of paper, I take it; correct?
A Uh-huh.
Q And make them 60, 80 and 100.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A (Nodding head.)
Q How long after that request were they able to fulfill the request for some test paper?
A Typically, we would determine what we would like to make in a trial. That's how these experimental papers were made, in a trial setting. We decide what types of papers we want to try and produce and then -- when it was actually scheduled, might be a month, an average time frame. It depends on their windows of opportunity and their production schedule at the mill and when they would be available to run a trial for us.
Q Do you think that they were able to comply with Philip Morris' request for 60, 80 and 100 Coresta unit papers within, say, two or three months when the request was made back in the mid-'90s?
A They were able -- they would be able to provide us with experimental papers, yes. They were not able, prior to this year, to produce production -- papers for production.
Q And do you know why?
A Because of the difficulties that I mentioned in producing those high porosity base sheets.
Q If we were to go pull a Merit PaperSelect

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

brand off the shelf today and run it through a Coresta machine, what would the range of Coresta units be?

A I don't know. It would depend on which product you look at.

Q Okay. Just the Merit Regular, for instance?

A If the target, for example, were a 60 Coresta paper, you might see readings anywhere between, I'd say, 40 to 80 Coresta as a possibility.

Q Was there similar variability in Coresta permeability measurments, say, back in the 1980s with just regular cigarettes?

A There's always been a fair degree of variation in permeability. Usually the higher the target, the more variable it becomes.

Q Is there a specification range for Coresta permeability at Philip Morris today for the PaperSelect products, realizing they're different from product to product?

A I'm not sure I understand that question.

Q Yes. Does Philip Morris have in place specifications for its PaperSelect products -- and we can use the Merit Regular as an example so we don't have to worry about all the different ones.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Stanford Libraries industrydocuments.ucsf.edu/docs/lfhl0001

But is there a specific range that is specified in terms of Coresta units for the paper for Merit Regulars, for instance?

A There should be, but I can't tell you what it is. At the time I left the project, that was still being finalized.

Q With regard to the PaperSelect products, and again, for an example, say, let's use the Merit Regular, are you aware of any calculations of mass burn rate for those particular products?

A No.

Q Do you know if any mass burn rate calculations had been made for the Merit Regular?

A No, I don't know.

Q In looking at the Marlboro 100 soft pack chart again, do you notice any variables in the circumference of the cigarettes from time to time throughout the thirteen-year period?

(Ms. Heskett exited the room.)

MR. CRAMPTON: There's a question pending.

A Yes, there's some variability.

BY MR. GRISHAM:

Q In the circumference?

A In the circumference, yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q And what would that be attributable to, in your opinion?
A In my opinion, that would be within the realm of normal variation.
Q So there was a range of variation that was allowed in circumference?
A There is a range that's typical, yes.
Q Is the same true with the citrate levels? Do you notice a variation from time to time from 1980 to 1993 as evidenced by that chart?
A With the exception of one or two high numbers, I would say it is within the range of normal paper, which is targeted about a .6 percent citrate.
Q In those instances where there was variation by some higher numbers of citrate, what is that attributable to?
A That would lead me to believe that that was a different paper that had a different target level of citrate on it.
Q Why from 1980 through 1993 with a single brand cigarette from a single manufacturer would there be these differences in such items as permeability or Coresta measurement, circumference and citrate level?
A The higher citrate level, as I said,

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

would seem to indicate a paper change, and that, I would assume, would be in response to tar deliveries, the maintenance of tar deliveries for products.

Q So this kind of goes back to a line we talked about this morning, a line of questioning, and that is, the characteristics of even a single brand of cigarette had to be modified or tweaked or altered from time to time to maintain a specification of tar delivery; correct?

A Yes. Yes.

Q And that's not unique to the Marlboro 100 brand, I take it?

A No, that's not -- that would be a standard type of change that could occur in response to a tar delivery maintenance issue.

Q Okay. And I might not have described it earlier, but what I was getting at on this PaperSelect paper, the base paper, the -- say, for instance, the target Coresta unit was 60. Has Philip Morris maintained a specification range outside of which is unacceptable for a target of paper, a target of 60?

A My answer would be the same, that there should be such a specification with a range. It's just I don't know exactly what that range is.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q I thought that's what you told me.

(Newman Exhibit No. 9 was marked.)

BY MR. GRISHAM:

Q I'll hand you Exhibit Number 9 there, Ms. Newman, and ask you if you can identify that document?

A I can't recall exact circumstances of experiment 1 and experiment 2. I believe these are models made prior to banded papers.

Q What is the year of the experiment?

A 1993, for one. Let's see. 1993 for experiment 1 and 2.

The reason I say prior to banded papers is because of the MAP as the additive.

Q Just for the record, what is MAP, M-A-P?

A The monoammonium phosphate. That was an additive we looked at with the unbanded work.

These numbers here would have -- look like they would have been predictions from our model that we have, cigarette design model --

Q Okay.

A -- where it -- for any prototype that's modeled, it will give you values for the amount of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

weight burned between puffs and during puffs and the whole puff cycle.

Q Were there actual cigarette -- experimental cigarettes made and tested per that experiment?

A That's what I'm trying to recall. I don't recall.

Q At any rate, it looks like, from the second page, that the specifications for the Coresta measurement on the paper for that modeling was 51 Coresta units; is that correct?

A Well, now this -- this is something different, I think. These are handsheets on the second page.

Q Okay. Maybe it's the third page, whatever page it talks about the paper characteristics.

A I have copies here. The first page and the third page, I think, are the same here. The fourth page is experiment 2. The fifth page is the same thing, experiment 2.

MR. CRAMPTON: Can I suggest something? I think he is talking about the second page. He's talking about characteristics. And you said handsheets?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

THE DEPONENT: These are handsheets, yes.
MR. CRAMPTON: See, they still have characteristics of paper. I think that's what he's asking about.
Is there a question pending?
MR. GRISHAM: Yes.
BY MR. GRISHAM:
Q I think what I'd like to find out is, there's, apparently, a characteristic of paper for some aspects of that experiment that requires a 51 Coresta unit permeability. Do you see that?
A But I don't believe that these papers that are described on the second page are linked to these codes here. It's a different code. That's why I'm confused. I don't think it's the same --
Q Are the Bates numbers consecutive?
A No.
MR. CRAMPTON: No. There's a five-page gap in there.
MR. GRISHAM: Okay.
MR. CRAMPTON: You want to see it?
MR. GRISHAM: I believe you.
BY MR. GRISHAM:
Q What I'm trying to get at is, is there a document before you, whatever page it is, that

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

discusses a 51 Coresta permeability?
A This page 2, Navin Gautam discusses a 51 Coresta paper.
Q Okay. Was that 51 Coresta paper actually produced, or is it modeled via computer or otherwise?
A I would say -- the application is -- I don't know. This was Navin's work. But the implication, because it says handsheet code, is that this was a paper where a handsheet was made of it, which is like a small square. It was not made on a commercial machine. It was just made in a laboratory. That's what I -- how I would interpret this.
Q Okay. At any point in time up through today, has Philip Morris had the capabilities of conducting computer or other electronic experiments or modeling of cigarettes?
A Yes. We have a cigarette design model.
Q Okay. How long has that been in use?
A Since -- I don't know exactly, maybe the late '80s time frame.
Q At any rate, when you began to work on the Tomorrow project in 1989, was there computer modeling available?
A It was still being developed at that

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

time. There was some capability there.
Q Is that modeling such today that one could type in the different parameters that one wanted for the paper -- for instance, I want an 80 Coresta paper, and I want to assume X amount of citrates, and circumference of a certain figure and length of rod -- and test that cigarette for its different characteristics electronically?
MR. CRAMPTON: Object to the form. You can answer.
A The capability is such that you have to model off of a control design. And there is -- there is the ability to enter in a permeability target, change the level of citrate, and I believe also change level of chalk is in there. And then it would give you a prediction as far as the impact on performance parameters of tar delivery, puff count, RTD, things of that nature.
Q How long has that technology been available?
A Well, again, I don't know exactly the date. I would say in the '80s, late '80s is when it was being developed. It's kind of an ongoing thing that it's constantly being upgraded and revised and improved upon.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Okay. Do you recall in your work on the Tomorrow project before 1992 using -- or asking someone to use that modeling software to predict performance characteristics such as you just described?

A In terms of -- yes. Tar delivery, impact on tar delivery, yes.

Q In 1989 when you first began to work in Research and Development on the Tomorrow project, who would you have directly reported to? Was it Mr. Houck?

A Houck.

Q Houck.

A Yes.

Q And what was his job title?

A He was the manager of domestic cigarette product development.

Q Who did he report to?

A He reported to Richard Heretick.

Q And his job title?

A He was the director of cigarette development. I believe that included domestic and international.

Q And who did he report to?

A I'm not certain at that time.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q At that time who was the director of Research and Development?
A The director of Research and Development.
MR. CRAMPTON: Assuming there is such a title.
A I'm not sure.
BY MR. GRISHAM:
Q Was there a person who was the penultimate person in charge of Research and Development?
A Well, Ken Houghton was, I think, vice president, actually, of Research and Development. But I'm not certain whether he was in '89 or not.
Q Okay. I want to start with your work in 1989, because that's a natural beginning point because you started working on the Tomorrow project then. And I'm going to work all the way up through today. Probably the best way to do this is on a yearly basis.
I would like to know what your time was spent directed toward during that eleven-year period -- ten-year, eleven-year period. So let's start with 1989. What did you do on a month-to-month basis?
MR. CRAMPTON: Are you asking in

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

connection with Project Tomorrow?
MR. GRISHAM: No. I'm trying to get an idea of what -- how much time she spent on Project Tomorrow --
MR. CRAMPTON: Versus other things?
MR. GRISHAM: -- versus other things, and perhaps within Project Tomorrow, how much was spent on paper as opposed to something else.
A Let's see. To the best of my recollection, in '89 I was primarily focused on Project Tomorrow, coming new into the group. That was a new -- a new assignment.
Also during that -- during -- I can't tell you on a yearly basis. I'm sorry. I can't separate it all out.
But during that eleven-year period or ten-year period that I was in that domestic cigarette product development, I also worked on low sidestream -- development of low sidestream products, several other new product requests from marketing.
At one point I became a hundred percent on banded papers, Project Tomorrow, and I believe that was probably around 1992, '93 time frame.
Q Okay. And did you stay a hundred percent directed toward Project Tomorrow through 1999?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Yes.
Q Okay. When Mr. Houghton -- at some point, I take it, Mr. Houghton ceased being the vice president of Research and Development while you were working on Project Tomorrow?
A He retired. I don't recall what year that was, though.
Q Let's take it in this fashion.
Tell me who all you reported to throughout your tenure, from 1989 through 1999, working on Project Tomorrow.
A Okay. I started out reporting to Willie Houck. Then when Harry Lanzillotti came in, I reported to Harry Lanzillotti.
Q About when?
A That would have been -- that would have been -- gosh, I don't know. 1991, around that time frame. I really don't know exactly when.
Then when he retired, Ty Murray took over the program, and I reported to him.
Q That was about what year?
A Probably about '93, I think. I remained reporting to Ty Murray until I transferred out of the program.
Q After 1999 what did you work on?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A After -- in June of 1999 I was transferred into the Accord product development program.
Q And that's where you're remaining today?
A Yes.
Q As a part of your work, have you had an opportunity to review patents?
A I've seen patents. I don't -- I have not routinely reviewed them.
Q More specifically, as a part of your work in trying to develop, beginning in '89, this Tomorrow product, from time to time did you look at patents of others to assist in design development or ideas?
A No.
Q Was there a particular person at Philip Morris that you may have worked with or for, may have worked under you, whose job it was to look at other patents that existed that might assist in developing a Tomorrow product?
A Not that I know of.
Q At any time in your work on the Tomorrow project, banded paper project, did you work with or talk with Mr. Kallianos?
A I know who he is. I don't remember discussing Project Tomorrow with him in any way.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Do you recall ever discussing any reduced ignition propensity cigarette with him?
A No.
Q Where at Philip Morris -- in terms of where, I'm talking about what department -- was NIST ignition propensity testing conducted?
A The ignition propensity testing, things surrounding that, were handled on the research side of the organization.
Q Was that in your -- part of your department?
A No. I was in -- in general, we're structured into product development and research, and the entire team had people representing both sides of the organization. All the ignition testing was done on the research side.
Q For the purposes of my understanding, the record as well, but when -- throughout today's deposition we've talked about terms, subjectives and subjective quality. As a person involved in and knowledgeable of cigarette design, can you tell us what subjectives are?
A Well, typically, there's a -- there's a list of attributes that are used to describe subjective performance of a product.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Okay. Some that I have seen are things like impact and throat grab, off-taste, aftertaste, acceptability. Are those generally the things that you're thinking about?
A That's the type of thing, yes.
Q Okay. And with regard to subjective testing at Philip Morris, when that would be measured, would there be a checklist that the panelists would go through as they tested an experimental model and a control model?
A Yes. Typically, a ballot is used where each attribute is rated in some way.
Q Likewise, we've talked throughout today about deliveries. Can you tell me from a layman's prospective what Philip Morris would be looking at?
I know we talked about tar. What else is involved in that concept of deliveries?
A Well, primarily, it is tar. Tar is -- is a calculated number based on TPM. TPM is what's measured on the smoking machine.
Q Total particulate matter?
A That's right.
Q And as a part of the concept of deliveries, looking at puff count, I think we've talked about puff count and tars, does one also look

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

at nicotine?
A Nicotine is routinely measured. The tar is -- TPM minus the nicotine in the water will give you the tar. That's how it works.
MR. GRISHAM: I think we're on number 10, aren't we, Bill?
MR. CRAMPTON: Yes, we are.
THE DEPONENT: Okay.

(Newman Exhibit No. 10 was marked.)

BY MR. GRISHAM:
Q Do you recognize Exhibit 10?
A No. This is the first time I've seen this, that I recall.
Q What does it purport to be?
A This would be a memo from -- from people conducting a panel test of some -- of a Project Hamlet prototype.
Q And who is it -- who is it specifically from?
A It is from Angela Smith.
Q Who is Ms. Smith?
A Angela Smith is someone who works in our product evaluation division or did. I guess she's

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

still there.
Q Okay. And who is the memo to?
A It's to Barbro Goodman.
Q And is Ms. Goodman someone who worked with you on the Tomorrow project?
A She was involved in the Tomorrow project, yes.
Q Is she retired today?
A Yes, she is.
Q Okay. Was she still working on the Tomorrow project at the time you were transferred to the Accord project in 1999?
A No, she was not there at that time.
Q What is the date of that memo?
A June 9, 1987.
Q Are you familiar with the typed memo that's marked as Exhibit 10? In other words, is that something that you would later have seen on Tomorrow projects; that is, the results of panel testing?
A Not quite in this format. But, typically, when a -- when a, for example, a POL was done or something, there's some sort of report generated similar to this, yes.
Q Just by way of example, this June 9, 1987, memo reports the ratings of a test cigarette

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

labeled as D7TL; correct?
A Yes.
Q Does that code have any meaning to you? Is there any way one can decipher it, like a serial number?
A No.
Q It's described as a nonporous paper cigarette with a modified blend in this memo; correct?
A Yes.
Q And, apparently, according to this memo, it was judged not to have any significant difference -- or not to be significantly different from the ratings of the full-flavored control cigarette, TK.
A That's correct.
Q What does TK stand for?
A I don't know.
Q It was noted to have a significant difference in tobacco taste rating where the control cigarette was to be rated slightly higher on tobacco taste; correct?
A Yes.
Q Is that the type memo you would see from time to time come back from POL testing on the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Tomorrow project where they would report the findings in this fashion?

A It's a similar format but not quite -- not quite the same.

Q At the bottom of Exhibit 10 under Table 1, Analytical Results, they have the different properties of the control and the test cigarette. And on the fourth category is porosity in seconds; correct?

A Yes.

Q Is that a Greiner measurement in this context?

A Yes.

Q And in this particular case, they were testing a control cigarette with 20 Greiner second paper versus 85 second Greiner paper?

A Yes.

Q Do you remember about what year the Coresta unit became the means of reporting porosity or permeability of paper?

A No, I do not. It would have -- I believe it was in the '90s, but I don't know what year.

Q Do you recall -- even though you haven't seen Exhibit 10, do you recall anyone reporting the results of this test to you as a part of your

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Tomorrow project work?
A No. No.

(Newman Exhibit No. 11 was marked.)

BY MR. GRISHAM:
Q Number 11 has some highlights on it, but I assume we can copy it without the highlights.
A Okay.
Q What did we mark that as, 11?
A Yes, 11.
Q Have you seen Exhibit 11 before?
A No, I haven't.
Q What does it purport to be?
A This is a report from A. G. Kallianos to Mr. Leo Meyer. Subject is, A cigarette that self-extinguishes within three minutes.
Q What's the date of that memo?
A July 23, 1981.
Q You've had a chance to review it here for a moment. Has anyone at Philip Morris reported the results of the testing on that experimental cigarette with you before today?
A No.
Q From your review of the document -- I

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

realize you haven't studied it for a long time. But just from your review here today, can you tell what was being tested?

A It appears to be some sort of coating on the cigarette paper from Ecusta.

Q It was rings coated on the paper?

A Coated rings, yes.

Q Does Mr. Kallianos give a report of the acceptability, subjective acceptability of that experimental cigarette?

A He says that the cigarette provides a reasonably normal smoke taste.

Q Do you have enough information from that memo to determine how that was achieved?

A No.

Q Who is or was Mr. Meyer?

A He was -- at one time he was the head of product development. I'm not sure whether he was a director -- I believe he was a director.

(Newman Exhibit No. 12 was marked.)

BY MR. GRISHAM:

Q Have you seen Exhibit 12 before?

A I believe this is one that I reviewed

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

with my attorney last week.
Q Okay.
MR. CRAMPTON: Other than that.
A Not other than that.
BY MR. GRISHAM:
Q Other than that, you haven't seen it?
A No.
Q Who -- what does it purport to be?
A It is -- it is a -- I don't know what you would call it. It's a memo talking about a paper trail, which is unclear to me what that means.
Q Who is it from and to?
A It is from W. F. Gannon to Dr. R. B. Seligman.
Q Who is Mr. Gannon?
A Walt Gannon is a scientist in R&D -- or was. I think he's retired now.
Q And who is Mr. Selegman?
A At one time he was the head of R&D, the vice president of R&D.
Q What's the date of that memo?
A September 4, 1979.
Q They refer -- they're talking about a self-extinguishing cigarette; correct?
A Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Q And they refer to having a shelf item?
A Yeah, he refers --
Q Why don't you read that sentence dealing with shelf items so we've got it in context.
A Okay. He says, Seriously, I have long felt that this activity should be sponsored by us so that if pressure builds unduly, we would have a shelf item to resort to.
Q Have you ever heard in the course of your work at Philip Morris the term "shelf item"?
A Yes.
Q What has that been used to refer to, in your experience?
A Typically, to me, a shelf item is something that -- a product or a design that has been fully developed and is just awaiting the need to launch it or the desire to launch it.
Q Okay. Shifting gears here a moment.
We were talking earlier about the Merit family of products that currently contains the PaperSelect design, and we talked, I think, about Merit Regulars, Merit Ultimas -- Merit Lights?
A Ultra Lights.
Q Ultra Lights. Okay. I was close. And you told me that they -- while they all have the?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A Banded paper concept, the base paper is different, depending upon the needs to be achieved with a particular brand.

How long did it take to develop what ultimately was in this family of products in terms of paper?

MR. CRAMPTON: Talking about the current paper?

MR. GRISHAM: Yes, in the Merits, PaperSelect.

BY MR. GRISHAM:

Q Okay. Let me start over.

With regard to the PaperSelect products currently on the market, you've told us that it does -- it performs good on subjectives. "Good" being it replicates what the control would be for that type of cigarette.

What all is involved in assessing these subjectives?

A For the Merit family, there was some POL testing done.

Q I'm sorry. I had trouble hearing.

A There was POL testing done for the Merit family.

Q Okay.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A I'm trying to recall if it was all of the brands in the Merit family or not. I don't think there was POL testing on the Merit Ultima, simply because of its low market share. It's more difficult to find the number of smokers required to do a POL.

Q Are these POL testings, to your understanding, scientifically epidemiologically sound studies with controls and experiments and the like?

A I assume so. That's really not my area. It is a commonly used form of testing in the company.

Q Generally when -- and this is somewhat off the topic of PaperSelect.

But in terms of changes being made to any particular brand or family brand within Philip Morris -- and the question is this, when, because of changes in blend or other aspect of design, POL testing, P-O-L testing is or panel testing is done, have there been changes made simply upon the results of that type of testing?

A You mean without further testing or --

Q Yes.

A Yes, there have been changes made based upon the results of POL testing.

Q Give me some examples.

A There's -- I believe with the -- for

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

example, in the reduced ingredient program, POL tests were done to evaluate flavor changes.

Q Okay. And some of the -- in other words, flavor changes were made, and then the testing was done to see how people liked it?

A Yes.

Q Okay. Earlier this morning we were talking about mass burn rate and ignition propensity and the relationship, and you indicated that -- and I don't want to put words in your mouth but -- so you can correct me if I say this wrong. But I thought you said mass burn rate is one of the things that you look at. It's important for ignition propensity determination, but it wasn't the only thing. Is that a fair --

A Well, early on in my involvement with the program, that was the focus was mass burn rate. That was felt to be a good indicator. But as the program developed and we were able to actually test products within this test where the mass burn rate was much less of a factor, the actual ignition testing was, by far, a better indicator of the results.

Q Are you familiar with any of the earlier ignition testing done on experimental cigarettes at Philip Morris with regard to ignition propensity?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

MR. CRAMPTON: Earlier than what?
MR. GRISHAM: Earlier than the NIST ignition testing.
A Can you ask me that again?
BY MR. GRISHAM:
Q Sure. When you came on board to work on Tomorrow, you said that mass burn rate was something that you and the other researchers focused on as a good test for ignition propensity. And then later on when the NIST test became available, it was recognized by you folks that that was a better indicator of ignition propensity, the mass burn rate; correct?
A That was a tool we used to evaluate our prototypes, yes.
Q Before the NIST ignition tests were used to evaluate the product, were you aware of other ignition tests that Philip Morris used before 1993, for instance, to determine ignition propensity?
A No.
Q Were you told or have you heard of the furniture mockup test?
A No.
Q Were you told of any testing to determine time-to ignition?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

A No.
Q Have you worked with attempting to determine or study the importance of time-to ignition as a test for ignition propensity?
A No.
Q Are you aware of any correlation between the time that a cigarette burns and its tendency to ignite a substrate?
A Can you clarify the time a cigarette burns?
Q Yes. I'll do my best.
Are you aware of any correlation between the time that a cigarette burns statically on a substrate in relationship to its tendency to ignite the substrate?
A No.
Q Have you been told about or learned about any theories that self-extinguishment needs to occur within a certain time parameter to avoid ignitions?
A No.
Q Currently, you've told me about the Merit family and the three brands within the Merit family that use PaperSelect. Are there any other brands currently being marketed that incorporate PaperSelect?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A No, not that I'm aware of.
Q You mentioned that there are different base papers in the PaperSelect brands that are used. Are there any other differences in those, such as band width or composition of the material in the bands, or is the difference simply the Coresta porosity measurement of the base paper?
A At the time when I left the program, the only difference was the base paper porosity.
Q We discussed your work at the later -- in the later stages of the Tomorrow project before you were transferred, and we've talked about these higher porosity papers. And the example we've given are some 60 and 80 and 100 Coresta papers.
Are you aware of any patents or inventions related to that high permeability paper?
A Not that I know of, no.
Q Earlier today we talked about some of the general parameters of your work, and you had mentioned that part of what you did was to produce papers with bands and measure their performance. I think we got that right. And the question I have, if I'm correct in that assumption, is part of what you did is how you measured the performance?
MR. CRAMPTON: Objection to the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

foundation to that question.
A My primary focus was trying to design the product to meet the tar delivery required. Towards the end of my involvement, I don't recall exact, maybe 1998 or so, the function of actually doing the ignition testing was transferred out of research into the development side of the project, and that particular laboratory or that function fell under my supervision.
BY MR. GRISHAM:
Q So what was done in order to assist in measuring the ignition or self-extinguishing performance of the product?
A Well, that was the NIST test, essentially, only in a larger enclosure so you could test more than one cigarette at a time.
Q Was that, essentially, a big box with a vent?
A Yes. Yes.
Q And then the substrate was inside the box, and there was an air flow, predetermined air flow?
A Yes.
Q For the benefit of those who may read this transcript or review your testimony otherwise,

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

can you tell us what is meant by the wet end of the paper production process?

A That just means putting -- while the paper is still being formed, it starts out as a wet material, and then it goes through a series of presses and dryers to dry it out and actually form the paper. And the bands are applied while it is still wet.

Q And that is a more desirable means of applying the bands?

A Yes.

Q You gave me a description of a method of applying bands that was attempted early on in your involvement of the project, and it was a method of printing bands?

A Gravure printing.

Q Correct. And as I recall, one of the things that you said that was not as good about that technique was there was a property in what was printed onto the bands that affected flavor?

A Yes.

Q What was that property?

A There was a material in there, CMC.

Q What is CMC?

A Carboxy methylcellulose.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q See, I don't know any more than before I started -- before I asked the question.
Okay. But the main question about this, though, is did you folks try that technique on a higher porosity paper to see what the effects would be?
A Not that I recall. At that time we didn't have the higher porosity papers available to us.
Q Did anyone theorize what the effects would be, as you recall, had higher porosity papers been used?
A Not that I recall, no.
Q Do you recall in the development phase of the work done on the machines to apply the bands through the moving orifice device overhearing or being involved in any of the technical plans for how fast that could be done, how efficiently that could be done?
A No. I believe the objective was to be able to run at current speeds, machine speeds.
Q What is that? What are current speeds?
A I couldn't tell you.
Q Do you know whether or not in the development of the moving orifice device to apply the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

bands other technology from other industries was reviewed, used or relied upon?
A I don't know.
Q When you were transferred in 1999, was there a person who took -- undertook your responsibilities?
A Yes.
Q Who was that?
A Tony Phan.
Q Can you spell that?
A It's P-H-A-N.
Q During the time that you were working on the Tomorrow and Happen projects, assuming there is any difference, really, in the two projects, who would you say would be the most knowledgeable person at Philip Morris during that time about the papermaking process?
A Well, Navin Gautam was very knowledgeable about it. He was involved early on in the program.
Q A moment ago you described how your involvement in Project Tomorrow started out as being part of what you did. Ultimately, I think that morphed into a hundred percent of your responsibilities around 1993 or so.
Before that time, you talked about some

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

other projects. But, in general, was everything you worked on something that had to do with cigarette paper?

A Not totally, no. I did work on some more conventional type product elements, you know, things, length changes and --

Q Okay. From your first involvement in the Tomorrow project up through the time that you ceased to be involved, how many people at Philip Morris were working on design, testing and product development for the banded paper?

A Probably, all together, several dozen, I would say.

Q Earlier today you talked about some current difficulties ongoing in using the higher porosity papers that had been adopted for the banded project. And I don't know if you mentioned the word tinsel strength or if there's some other component of -- is that what you were talking about?

A Yes.

Q Where did you learn about those current problems?

A Through discussions with various people. I have an occasion to frequent the mill myself, so I just, you know, become generally aware of what the

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

issues are today.
Q And by "the mill" are you referring to the Spotswood mill --
A Yes.
Q -- in New Jersey?
A Yes.
Q And, essentially, the paper is made there by Schweitzer, and it's shipped to Richmond --
A Yes.
Q -- for cigarettes to be made?
A Well, I believe they're also being made in North Carolina.
Q Okay. Good. In terms of recordkeeping and I guess, to a certain extent, bean counting, which I know all corporations have to do, was there a way that you charged your time or your time was allocated from a corporate standpoint to this project?
A There was a separate cost center for Project Tomorrow, so my time was charged to that.
Q Okay. What was it called?
A A cost center.
Q All right. And was it charged to that in terms of people hours or units and some other measure?

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

A I really -- I don't know.
Q Did you have to fill out like a sheet or something or log?
A No.
Q Someone took care of that who was your supervisor?
A I assume so. I -- I can only tell you that we had a different cost center than, say, domestic cigarette technology or domestic cigarette development.
Q And would the cost center deal with your time, the resources specifically for Project Tomorrow?
A Yes.
Q Okay. During the time period of 1989 to 1999, in the overall area of Domestic Product Development, about how many people were employed here at Philip Morris?
MR. CRAMPTON: I'm sorry. You said "here at Philip Morris." Did you mean total employees in Richmond or total employees for the whole company or --
MR. GRISHAM: The whole company.
MR. CRAMPTON: The whole company?
MR. GRISHAM: Yes.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - http://industrydocuments.ucsf.edu/docs/lfhl0001

A I don't know. You said for Domestic Product Development, though?
BY MR. GRISHAM:
Q Yes.
A So your question is how many people were employed in Domestic Product Development?
MR. CRAMPTON: I misunderstood your question.
MR. GRISHAM: Okay.
BY MR. GRISHAM:
Q Yes, that is my question.
A There are probably somewhere between -- at any given time, somewhere between two dozen and three dozen people. And people come and go, of course, so that --
Q Right. And during 1989 to 1999, would all of those people in some respect work on Project Tomorrow?
A No.
Q Some of those two or three dozen people might work totally on some other project?
A Yes.
Q Back in the time period from 1989 to '99, how many people hours per year did you provide?
A Now, do you want to know when I was a

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

hundred percent on Project Tomorrow, or do you want to know --

Q Yes.

A Somewhere in the neighborhood of 2000 hours in a year.

Q Okay. When you would receive information about POL testing with regard to Project Tomorrow work, who would you receive that from?

A That would come from someone within the product evaluation division. Typically, they assign people to various projects. So whoever would be their -- the designee for our project would supply the results.

Q Okay. Who would that have been for Tomorrow?

A Angela Smith was the person for most of that period of time. There was a period where I believe Armin Manwaring was assigned to Project Tomorrow. Those are the only names that I can recall.

MR. GRISHAM: Can we go off the record a second here?

(Recess.)

BY MR. GRISHAM:

Q Ms. Newman, earlier today we were talking

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

about some of the work that you had done on the PaperSelect project. You had said part of the job was to design paper that would create certain tar deliveries per puff as a target; correct?

A Well, the job was to design papers that would enable us to return to the current tar deliveries and puff counts.

Q Okay. And that's what I was getting to. The current tar deliveries being whatever the deliveries were for -- the Merit Regular, for instance, if you were trying to produce a paper for a PaperSelect Merit Regular, you would try to mimic the tar deliveries of a -- of an old Merit Regular?

A That's correct.

MR. GRISHAM: I appreciate your time, and I'm going to pass the witness at this point.

EXAMINATION

BY MR. CRAMPTON:

Q Ms. Newman, I have just a few questions.

For the record, my name is Bill Crampton, and I represent Philip Morris. And I just want to ask you. During the time when you were working on Project Tomorrow, did anyone ever tell you that you were working on a product that would be put on a

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

shelf and not be marketed if it was successful?
A No.
Q Did you ever have the sense that that was the case, that you were actually working on a shelf item?
A No.
Q During the time when you worked on Project Tomorrow, would you say that the project had a high priority, medium priority or some other description?
A I would say it had a high priority.
Q Was it an important project at Philip Morris during the time when you worked on it?
A Yes, it was.
MR. CRAMPTON: Thank you. I don't have any more questions.

EXAMINATION

BY MR. GRISHAM:
Q Did anyone, Ms. Newman, at Philip Morris ever discuss with you the pending legislation in Congress and the various states across the United States with regard to ignition propensity regulation?
A On occasion, in a project meeting there would be an update of legislative activity in

http://legacy.library.ucsf.edu/tid/atq07a00/pdf Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Washington.

Q Is it accurate to say, then, that as you and the other researchers at Philip Morris continued to work on the development of a banded paper to meet the goals of Project Tomorrow that, also, it was being reported to you at Philip Morris what was happening in Washington with respect to the fire safe cigarette legislation?

A Well, I wouldn't say we were given thorough accounts, only that we were aware that there was activity which increased the need for us to be successful in this project.

Q Was there ever a time when it would be reported to you researchers at Philip Morris that the activity on the Fire Safe Cigarette Act or similar legislation aimed at regulating the ignition propensity of cigarettes was calming down?

A No.

Q Were you aware that a Fire Safe Cigarette Act passed in the state of New York this year?

A In general terms, I've heard that. I haven't read details about it, no.

Q How did you hear that?

A Just people at work had mentioned it to me.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q When did Philip Morris launch, as a commercial product, its Merit family of cigarettes with PaperSelect as the wrapper?
A I believe it was in the April time frame when it was launched.
Q April 2000?
A Yes.
Q Okay. When did these folks begin to mention to you at work about the New York Fire Safe Cigarette Act?
A Let's see. I would say maybe two or three months ago I heard something about some activity in New York.
MR. GRISHAM: Pass the witness.

EXAMINATION

BY MR. CRAMPTON:
Q When people talked to you about legislative activities relating to ignition propensity of cigarettes, did anyone ever suggest to you that Philip Morris would not market a reduced ignition propensity cigarette if it had one without the legislation requiring it?
A No.
Q The -- I think you said it was April of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

2000 when the PaperSelect went on the Merit cigarettes?
A I believe so.
Q When was it that Philip Morris announced that it would put PaperSelect on Merit cigarettes, do you remember that?
A No. That may have been the April. I'm not sure --
Q Okay.
A -- exactly the timing of the announcement versus implementation.
Q Do you remember whether that announcement came before or after you -- the first time you heard about legislation in New York?
A I believe it was before.
MR. CRAMPTON: Pass the witness.

EXAMINATION

BY MR. GRISHAM:
Q Are you aware of any activities by Philip Morris to monitor legislative activities?
A No.
Q Do you know whether or not Philip Morris employs persons or companies to monitor what's going on in the state legislatures and the House of

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

Representatives and the Senate of the United States?
A No. I know that there have been task forces in the past, tobacco study groups, that sort of thing where jointly these topics were discussed.
Q Okay. Joint -- the joint --
MR. CRAMPTON: TSG, is that what you were thinking of?
MR. GRISHAM: That's what you were talking. Okay. I'm sorry.
BY MR. GRISHAM:
Q I thought you were referring to something -- you're referring to the technical study group and the technical advisory groups to Congress --
A Yes.
Q -- of which some employees of Philip Morris participated?
A Yes.
Q Okay. You're not referring to any industry joint ventures?
A Oh, no.
Q Okay. Did you ever work with any researchers from any other tobacco companies on this issue?
A No.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

Q Did you ever review any work of other tobacco company researchers for the development or design or implementation of a reduced ignition propensity cigarette model?

A No.

MR. GRISHAM: Pass the witness.

MR. CRAMPTON: Pass the witness. Thank you very much.

MR. GRISHAM: We're off the record.

(The deposition concluded at 3:17 p.m.)

And further this deponent saith not.

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

CHANGES AND SIGNATURE

PAGE	LINE	CHANGE	REASON

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

I, DEBORAH J. NEWMAN, have read the foregoing deposition and hereby affix my signature that same is true and correct, except as noted above.

DEBORAH J. NEWMAN

THE STATE OF TEXAS

COUNTY OF

Before me, , on this day personally appeared DEBORAH J. NEWMAN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that they executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this day of .

NOTARY PUBLIC IN AND
FOR THE STATE OF TEXAS

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001

CAUSE NO. 262-94

VICKI STACKS, as Next Friend of Shannon Moore, A Minor,	IN THE DISTRICT COURT
Plaintiff,	
v.	
PHILIP MORRIS INCORPORATED; PHILIP MORRIS U.S.A.; and SHELLY MOORE,	JOHNSON COUNTY, TEXAS
Defendants.	18TH JUDICIAL DISTRICT

REPORTER'S CERTIFICATION
DEPOSITION OF DEBORAH J. NEWMAN
October 30, 2000

I, Valarie L. Schmit, RPR in and for the State of Virginia, hereby certify to the following:

That the witness, DEBORAH J. NEWMAN, was duly sworn by the officer and that the transcript of the oral deposition is a true record of the testimony given by the witness;

That the deposition transcript was submitted on to the witness or to the attorney for the witness for examination, signature, and return to me by ;

That pursuant to information given to the deposition officer at the time said testimony was taken, the following includes counsel for all parties

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

of record:
MR. ROBERT B. WALTMAN, ATTORNEY FOR PLAINTIFF
MR. LYNN GRISHAM, ATTORNEY FOR PLAINTIFF
MR. WILLIAM J. CRAMPTON, ATTORNEY FOR PHILIP MORRIS INCORPORATED and PHILIP MORRIS U.S.A.

I further certify that I am neither counsel for, related to, nor employed by any of the parties or attorneys in the action in which this proceeding was taken, and further that I am not financially or otherwise interested in the outcome of the action.

Further certification requirements pursuant to Rule 203 of TRCP will be certified to after they have occurred.

Certified to by me this day of , 2000.

Valarie L. Schmit, RPR
Expiration date: 6/30/04

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Digitized by the Legacy Industry Documents Library - industrydocuments.ucsf.edu/docs/lfhl0001

FURTHER CERTIFICATION UNDER RULE 203 TRCP

The original deposition {was / was not} returned to the deposition officer on .

If returned, the attached changes and signature page contains any changes and the reasons therefor:

If returned, the original deposition was delivered to , Custodial Attorney;

That $ is the deposition officer's charges to the Plaintiff for preparing the original deposition transcript and any copies of exhibits:

That the deposition was delivered in accordance with Rule 203, and that a copy of this certificate was served on all parties shown herein on and filed with the Clerk.

Certified to by me this day of , .

Valarie L. Schmit, RPR
Expiration Date: 6/30/04

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Support provided by the UCSF Industry Documents Library. http://industrydocuments.ucsf.edu/docs/lfhl0001

http://legacy.library.ucsf.edu/tid/atq07a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/lfhl0001